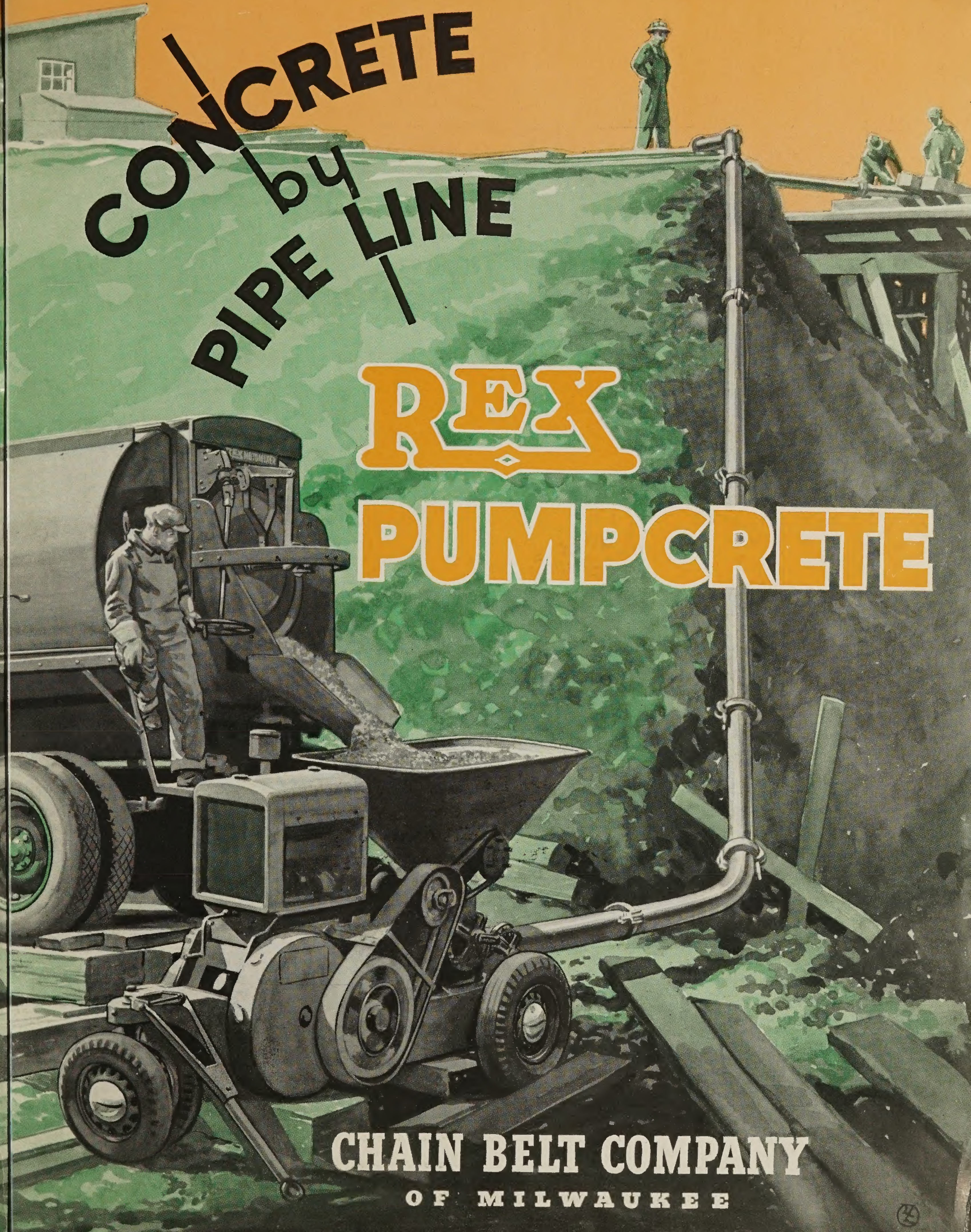


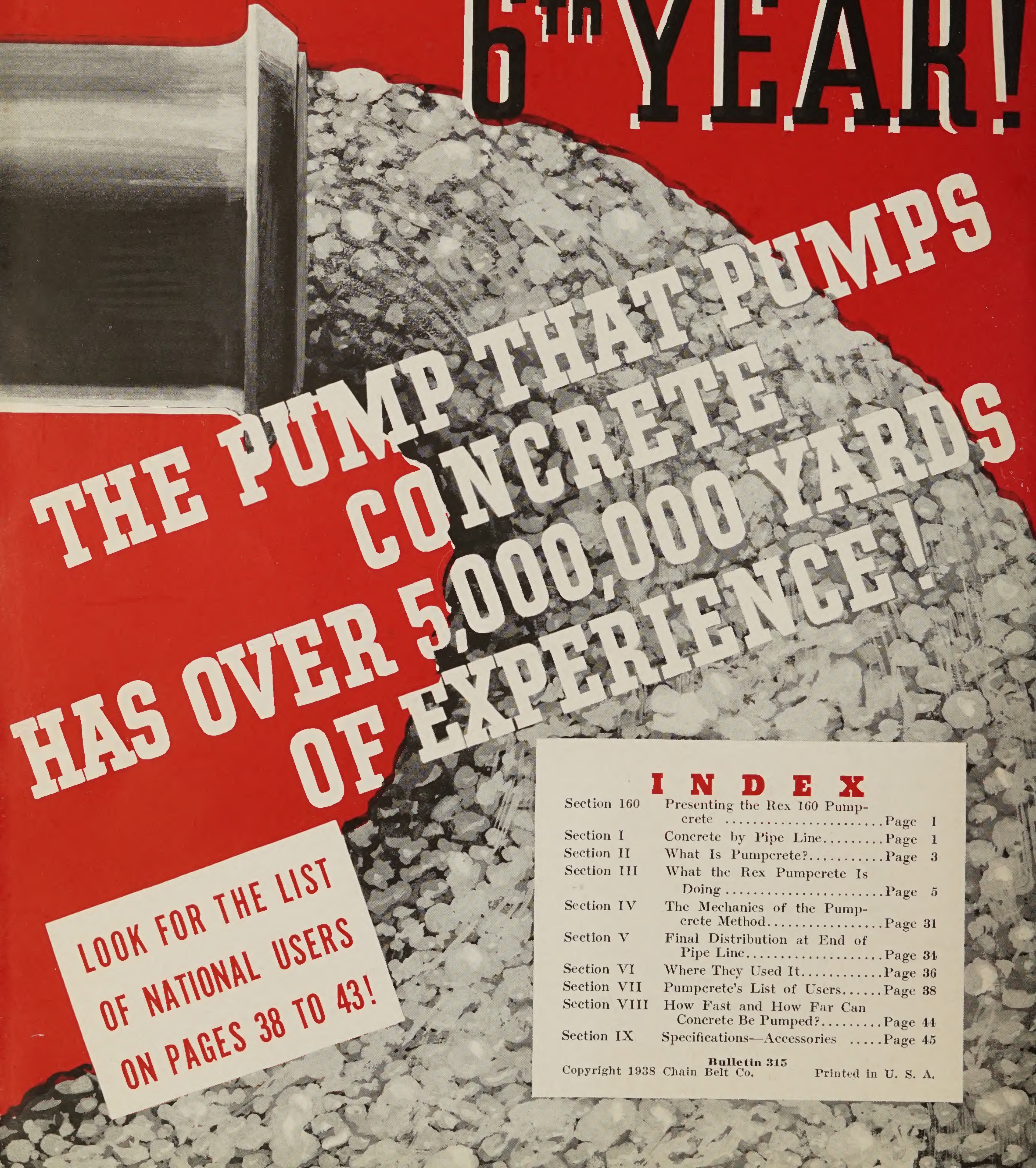
CONCRETE by PIPE LINE

REX PUMPCRETE

CHAIN BELT COMPANY

OF MILWAUKEE

REX PUMPCRETE IN ITS 6th YEAR!



THE PUMP THAT PUMPS CONCRETE HAS OVER 5,000,000 YARDS OF EXPERIENCE!

LOOK FOR THE LIST OF NATIONAL USERS ON PAGES 38 TO 43!

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Bulletin 315
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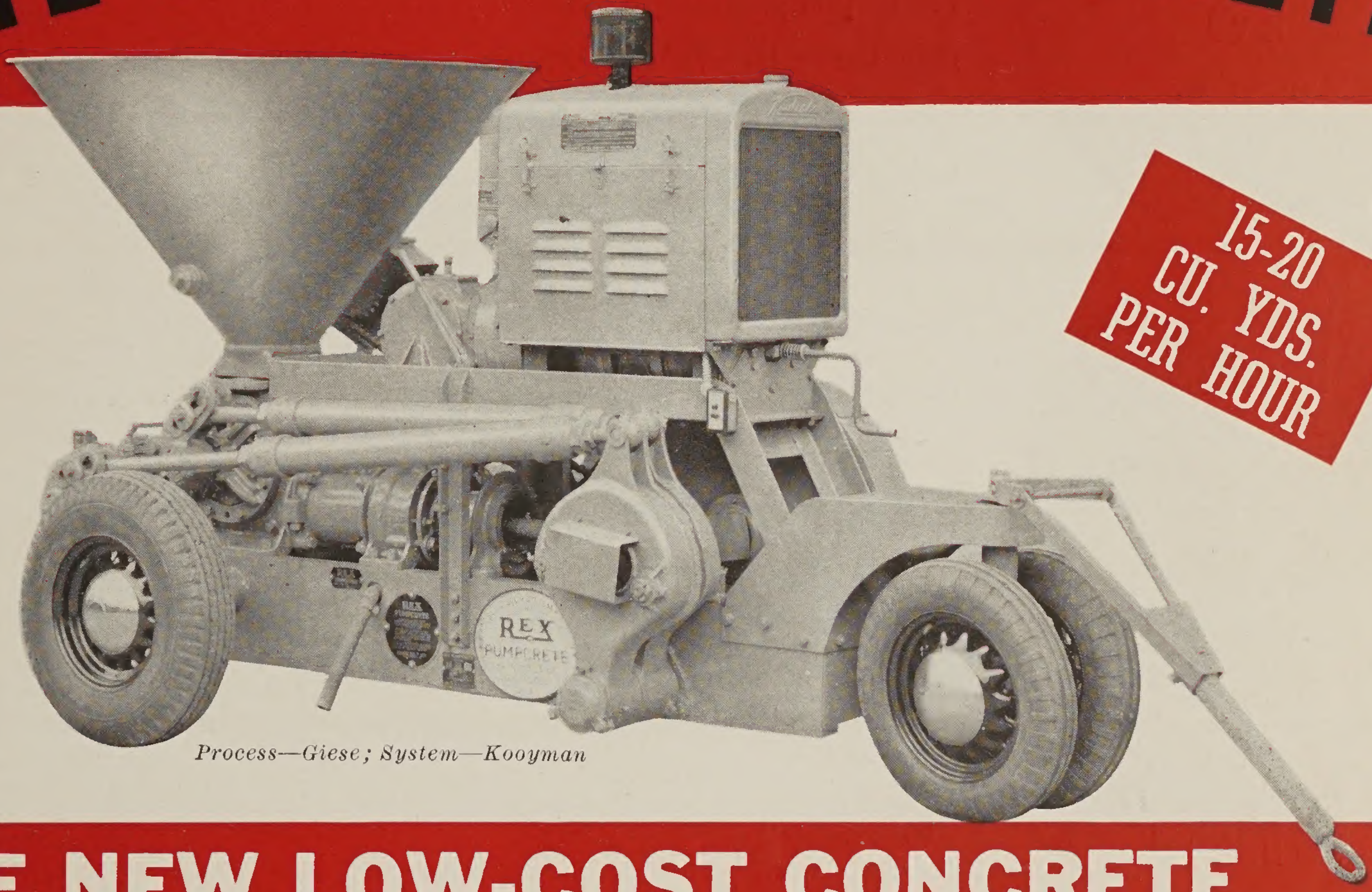
PRESENTING. . . .

THE REX 160 PUMPCRETE!



15-20 CU. YDS. PER HOUR

Process—Giese; System—Kooyman

THE NEW LOW-COST CONCRETE PUMP FOR

OVERPASSES
UNDERPASSES
BRIDGES
VIADUCTS
CULVERTS
SEWAGE PLANTS
HEADWALLS
FOOTINGS
HOUSING PROJECTS
WAREHOUSES
SMALL DAMS

Every once in a while there appears a machine that "clicks" right from the start—that moves into the average contracting setup and starts performing—mechanically and from a cost and profit standpoint—in a way that immediately shows its superiority over machines and methods previously used.

That's the case of the Rex 160 Pumpcrete. This new small concrete pump has been accepted as a standard tool of the industry—a low-cost method of placing concrete on smaller jobs all over the country.

This Section 160 of the Pumpcrete catalog shows just why and where the Rex 160 is making small job placement history.

ANSWERS TO 8 QUESTIONS ABOUT

WHAT IS IT?

The Rex 160 Pumpcrete is a smaller concrete pump designed and built along the same principles that proved so successful in the now well known Rex 180 and 200 Pumpcretes. A single acting horizontal piston pump, it is powered by a rugged 4-cylinder motor and is mounted on large, easy-rolling pneumatic tires. Throughout its construction, care has been taken to combine great strength with less weight for longer life and improved mobility.

HOW PORTABLE IS IT?

Its wide pneumatic tires and light weight (5600 pounds) give the 160 the mobility of the modern 10-S mixer. This means that it can be spotted easily—several times in the course of one job if necessary—and with little loss of working time. It trails smoothly behind a truck for short hauls or it may be quickly loaded on a truck or trailer for job-to-job transportation.

WHAT IS ITS CAPACITY?

The 160 has a capacity of from 15 to 20 cubic yards per hour—ideal for working with 10-S or 14-S mixers or truck delivery of ready-mixed concrete. The hourly production, of course, depends somewhat on the length of pipe used, the vertical rise and the number of bends in the pipe—but *under normal setup conditions* the Rex 160 Pumpcrete will usually average 15 cubic yards per hour.

WILL IT HANDLE ALL MIXES?

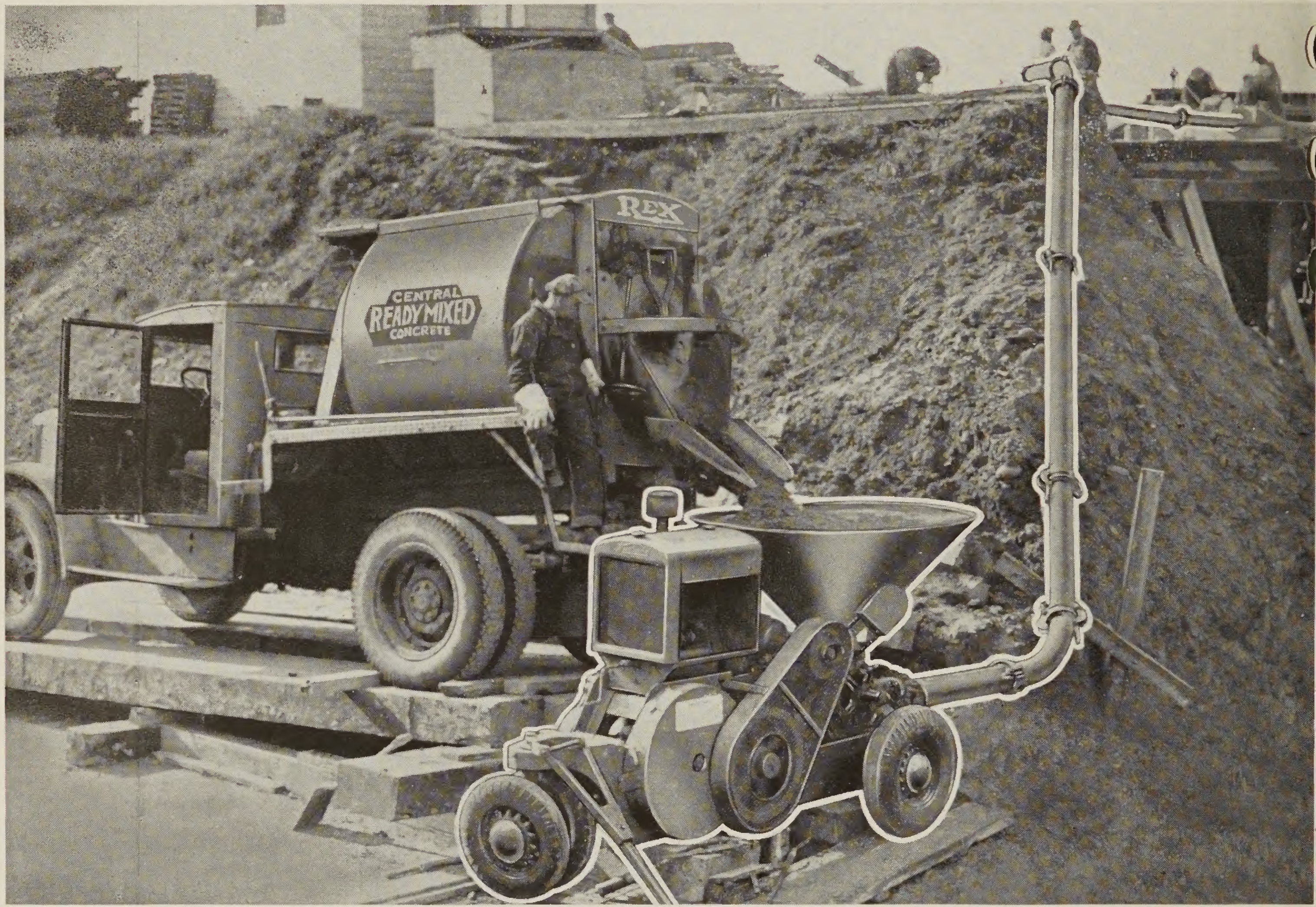
With a 6-inch pipe line, nearly all commonly used mixtures can be pumped by the 160 Pumpcrete provided that they are of a readily workable consistency with a maximum aggregate size of 2 inches. This matter of pumpable mixes is taken up in greater detail in the book "Concrete by Pump and Pipe Line," a copy of which will be sent to you free at your request. Practically all mixes ordinarily used on the average small concrete placement jobs can be easily and efficiently handled by the Rex 160 Pumpcrete.

THE REX 160 PUMPCRETE

HOW HIGH AND HOW FAR WILL IT PUMP CONCRETE?	On the basis that 1 foot of vertical pumping is equal to 8 feet of horizontal pumping, the Rex 160 Pumpcrete with a 6-inch pipe line can pump concrete a horizontal distance of 800 feet or to a vertical height of 100 feet. Any combination of horizontal and vertical pumping between these two limits can be handled very efficiently—thus enabling you to place concrete from one setup to every point of the average small building, overpass, viaduct, bridge, etc., where the total yardage does not exceed 5000 yards.
WHAT ABOUT MAINTENANCE AND OPERATING COST?	Operating costs are very low because the Rex 160 Pumpcrete requires only 25 h.p.—supplied by a modern, economical water-cooled engine. Maintenance and upkeep costs are so reasonable as to be almost negligible. Replaceable linings which protect all moving parts exposed to abrasive concrete wear, are inexpensive and easily renewed.
HOW ADAPTABLE IS IT?	The adaptability of the Rex 160 Pumpcrete to almost any type of concrete placement job is proved by fact. This husky new machine has already been used on bridges, culverts, viaducts, warehouses, buildings, headwalls and many other types of construction projects. The Rex 160 is truly a general utility placement system—to be used by small job contractors for 9 out of 10 of their jobs averaging from 100 to 5000 yards.
WHAT HAS IT DONE?	Just as the 180 and 200 Rex Pumpcretes have for five years been outstandingly successful on larger projects, the new Rex 160 Pumpcrete has been successful in the small job contracting field. What has it done? The next five pages show a small part of its record established in the first year of its life! Read them and see.

WHAT THE REX 160 HAS DONE

IN MILWAUKEE, WISCONSIN . . .



THE JOB—Construction of overpass for Chicago, Milwaukee, St. Paul & Pacific Railroad.

YARDAGE PUMPED—600 yards.

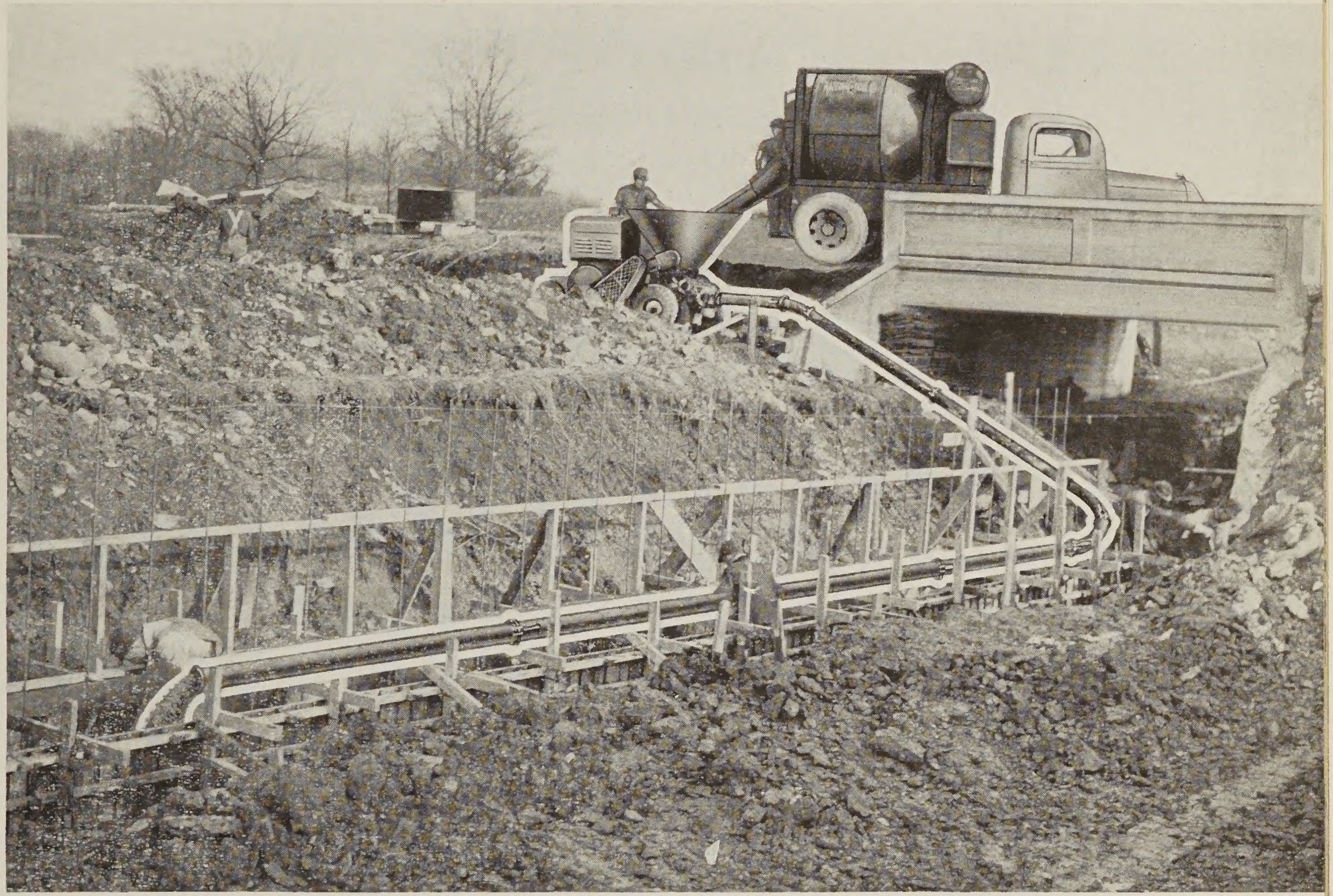
In less than an hour from the time it arrived on this job, the Rex 160 Pumpcrete was pumping an average of 15 cubic yards into the form every hour. There were no costly preliminaries, no trestle or buggy runs to build—initial setup cost was cut to the bone. The simple pipe-line setup made it possible to place concrete without interfering with the railroad schedules.

CONTRACTOR—Klug and Smith, Milwaukee.

Complete and rapid portability on pneumatic tires permits easy spotting of the Rex 160 Pumpcrete on the job; its simple pipe line is quickly set up — just as quickly cleaned and dismantled. Its all-around utility means efficiency never thought possible before in placing concrete—and greater small job profits *to the contractor who forgets the old stuff!*

WHAT THE REX 160 HAS DONE

IN MT. MERIDIAN, INDIANA . . .



THE JOB — Construction of 12 culverts, one bridge and headwalls, large and small, along 4 miles of new roadway.

YARDAGE PUMPED—3000 yards.

CONTRACTOR—R. W. McCalman Company.

Think of it—from little 15-yard pours up to 100-yard pours—scattered over four miles of muddy right of way — a job that defied old-fashioned placing methods to do it at a profit!

The contractor bought a new Rex 160 Pumpcrete—used it on 75% of his work—"at times saved up to a dollar per cubic yard." His largest pour of 99 yards on a single slab was made in 5¾ hours. The Rex 160 was regularly moved from place to place to handle pours of 15 to 20 yards. Average time for a one-mile move, laying and connecting 80 feet of pipe line, was one and one-half hours.

Only the pneumatic-tired, completely portable Rex 160 Pumpcrete, with a capacity that is ideal for working with a 10-S or 14-S mixer, could handle such split-up jobs so efficiently.

When asked if he could be quoted, this contractor said, "You can quote me that the Pumpcrete at times saved up to a dollar per yard—and—it is the most efficient piece of machinery I ever had on a job."

WHAT THE REX 160 HAS DONE

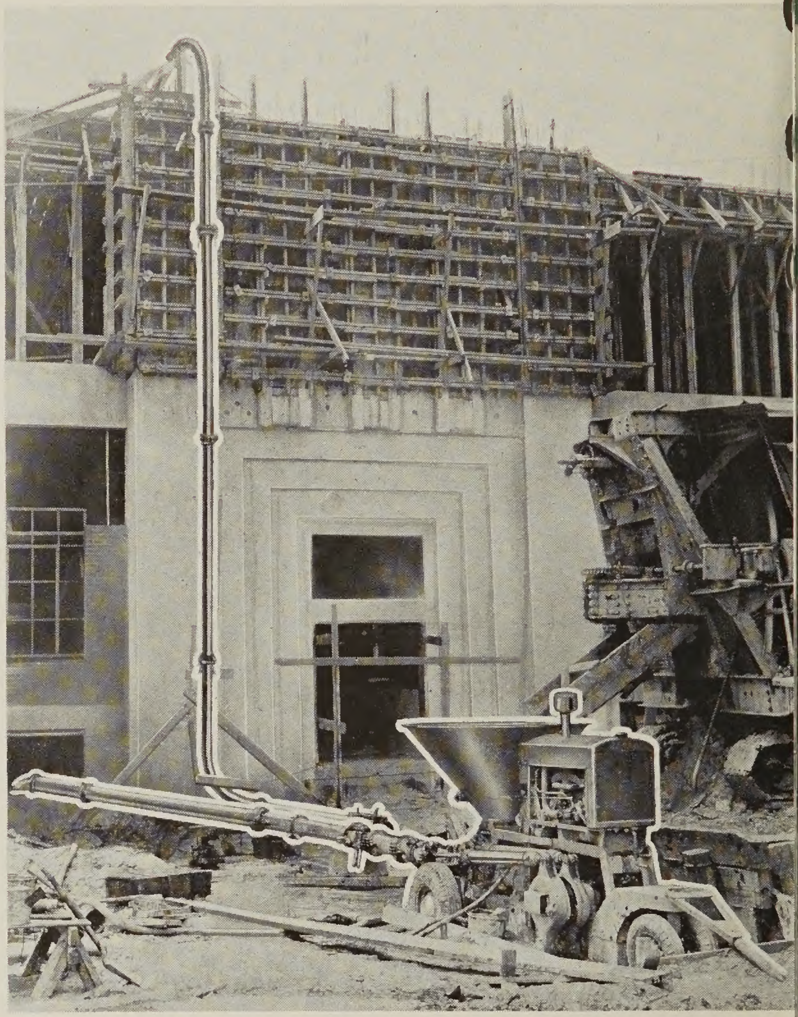
IN BENTON HARBOR, MICHIGAN . . .

THE JOB—Cold storage warehouse for the House of David colony.

YARDAGE PUMPED—8000 yards.

CONTRACTOR—John G. Yerington.

●



8000 yards of concrete have been placed in the new cold-storage warehouse built by the House of David colony of Benton Harbor, Michigan.

Each floor of this four-story building contains over 34,000 feet of storage area — calling for many scattered pours into widely separated beams, slabs and columns. "It's a big enough job," said the contractor, "to prove the 160's superiority over the old-fashioned tower hoist chute and buggy method of getting concrete into widely separated forms like these."

John G. Yerington, who contracted to deliver the concrete into the forms, towed his Rex 160 to the job, set it up in less than three hours—placed up to 200 yards per day with it. With two pipe lines in place—one to the top of the forms and one to the basement, he alternated his pumping between the two and kept an almost steady placement program in progress.

When asked what he liked most about the Rex 160 Pumpcrete and pipe line, Mr. Yerington replied, "I like its simplicity. I haven't had to build any buggy runs, any hoists or any scaffolding to speak of. And the time it takes me to place a pipe line is nothing compared to what it would have been had I used any other method. If I had it to do over again I would certainly do it the same way."

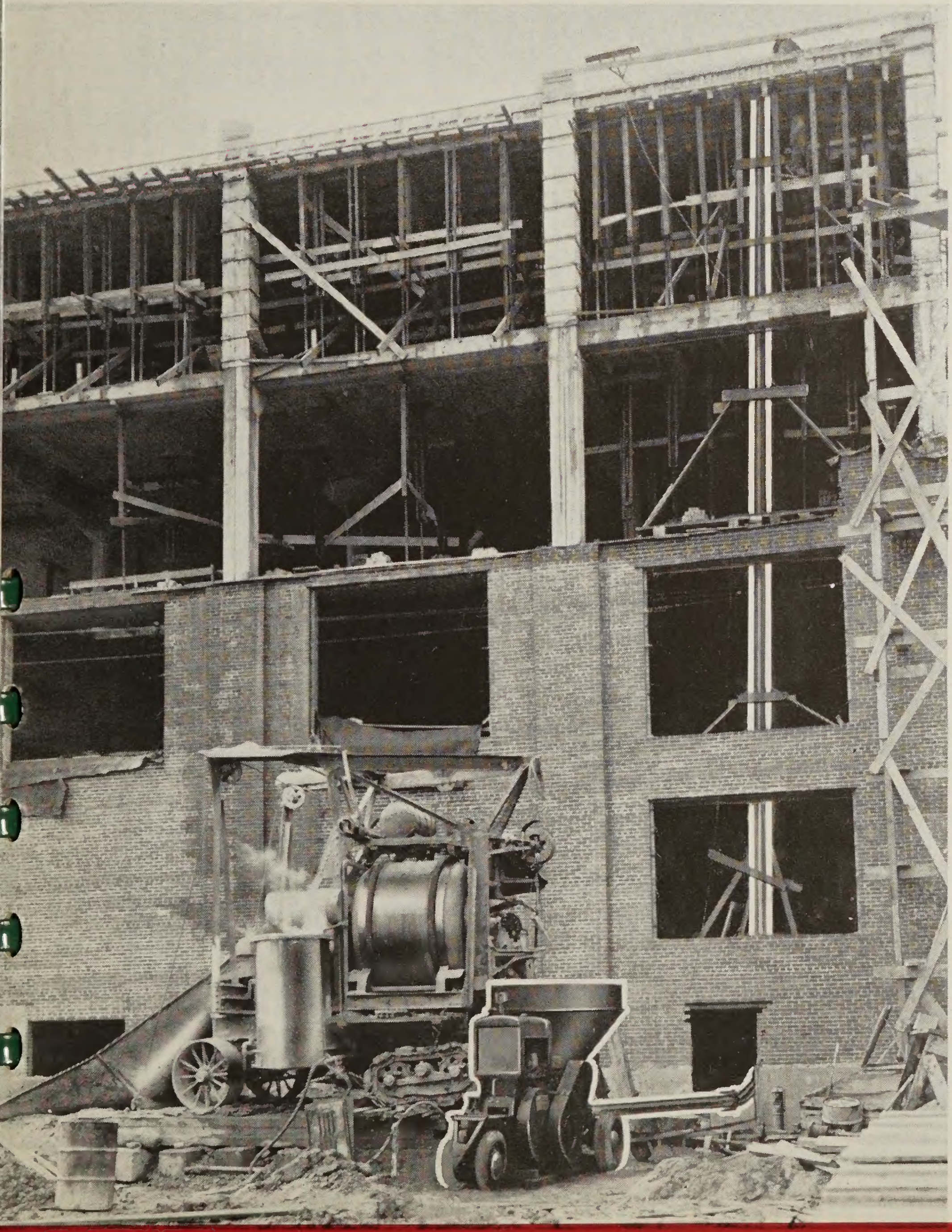
WHAT THE REX 160 HAS DONE

IN NEENAH, WISCONSIN...

THE JOB—Five-story concrete warehouse for the Kimberly Clark Corporation.

YARDAGE PUMPED—5000 cubic yards.

THE CONTRACTOR—Koepke Construction Company, Appleton, Wisconsin.



Here again the Rex 160 Pumpcrete proves that it can easily handle the concrete placement of large jobs as well as smaller ones.

• •

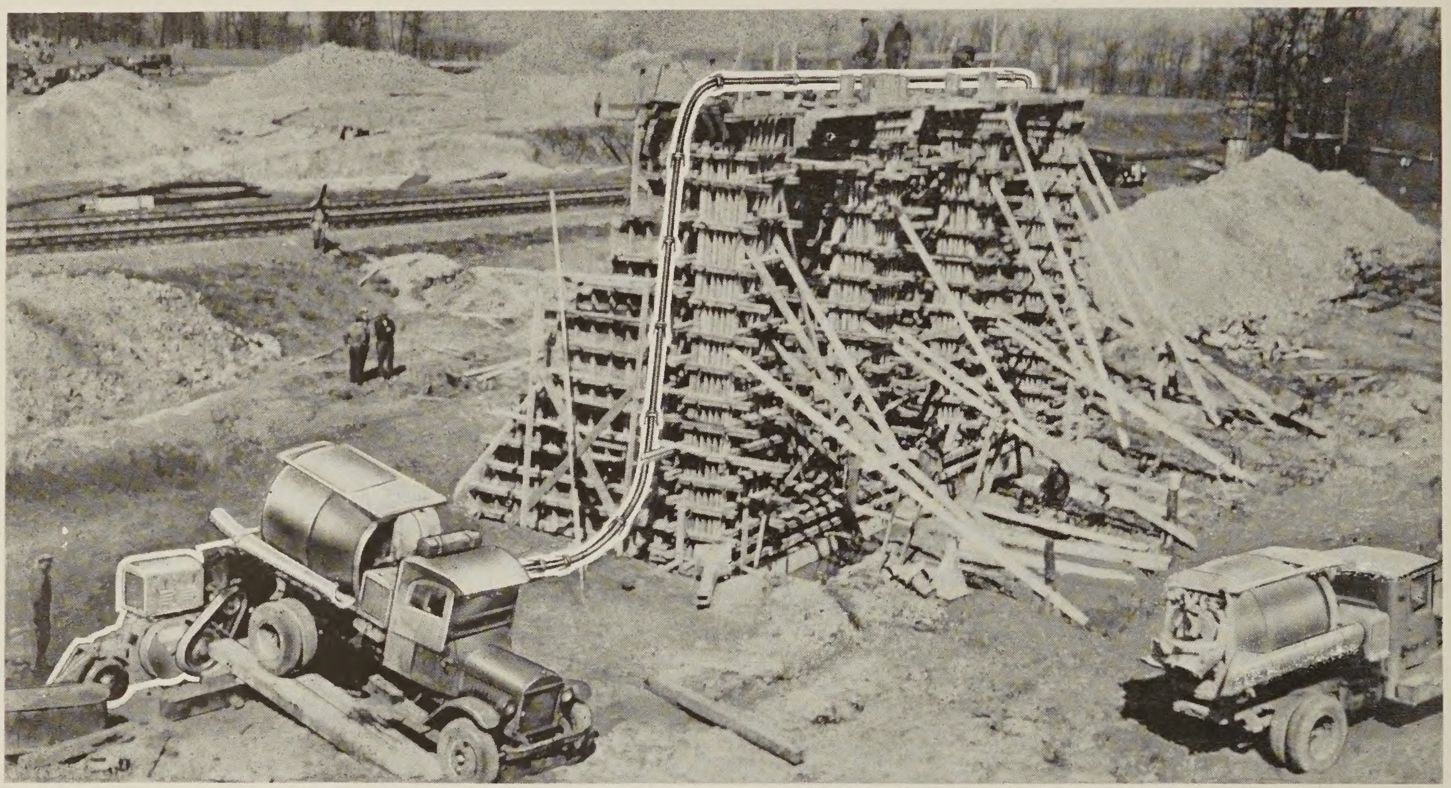
The photograph clearly illustrates the setup. Fed from a converted paver, the Rex Pumpcrete pumps concrete from basement slab to roof slab—from one end of the building to the other—into narrow columns and beams — with an efficiency that kept costs at rock bottom and a dependability characteristic of all Rex Pumpcretes.

• •

The concrete for this building, which is approximately 65 feet high and 150 feet long, was placed almost continuously — calling for almost maximum production from the Pumpcrete day after day.

WHAT THE REX 160 HAS DONE

IN SCHERERVILLE, INDIANA . . .



THE JOB—Super Highway overpass on route 30 over Pennsylvania Railroad.

YARDAGE PUMPED—1700 cubic yards.

This job, entailing the placing of some 1700 yards of concrete in twenty-odd columns, together with caps and the bridge decking, was already in progress when the Rex Pumpcrete was put on the job. Up to that time pouring was being handled by a crane and bucket.

CONTRACTOR—J. C. O'Connor & Sons.

The 160 Pumpcrete was towed to the job from another in the vicinity, was spotted and ready for operation in less than 1½ hours—a characteristic that makes it more valuable on any placement job where time is an important factor.

REX

CONCRETE BY PIPELINE WITH REX PUMPCRETE

EXPERIENCE IS A GREAT TEACHER...

And some 25,000,000 bags of cement, or well over 5,000,000 cubic yards of concrete in the forms means concrete placing experience. That's the story of the Rex PUMPCRETE. Rex PUMPCRETE has now placed more than 5,000,000 yards of concrete.

From this experience it can be authoritatively stated that the Rex PUMPCRETE generally is the lowest cost method of placing concrete where job conditions do not permit placement directly into the forms.

LOWER YOUR CONCRETE PLACING COSTS...

The pump and pipe line is the accepted method for transporting a fluid.

Freshly mixed concrete is a semi-fluid, and as such conforms to many of the laws of hydraulics.

Bridge the gap between the mixer and the forms by transporting and placing concrete with the Rex PUMPCRETE and Pipe Line.

CONCRETE BY PIPELINE WITH REX PUMPCRETE

HOW

THE REX PUMPCRETE SYSTEM WILL CARRY YOUR CONCRETE FROM YOUR MIXER, OR TRUCK DELIVERY OF READY-MIXED, AND PLACE IT INTO THE FORMS:

1. At a lower cost per cubic yard than that usually obtained by using any of the heretofore "conventional" methods.
2. With a simplicity far exceeding any other system ever used for placing concrete.
3. With a consistent speed that develops the highest efficiency from every man in the concrete crew.

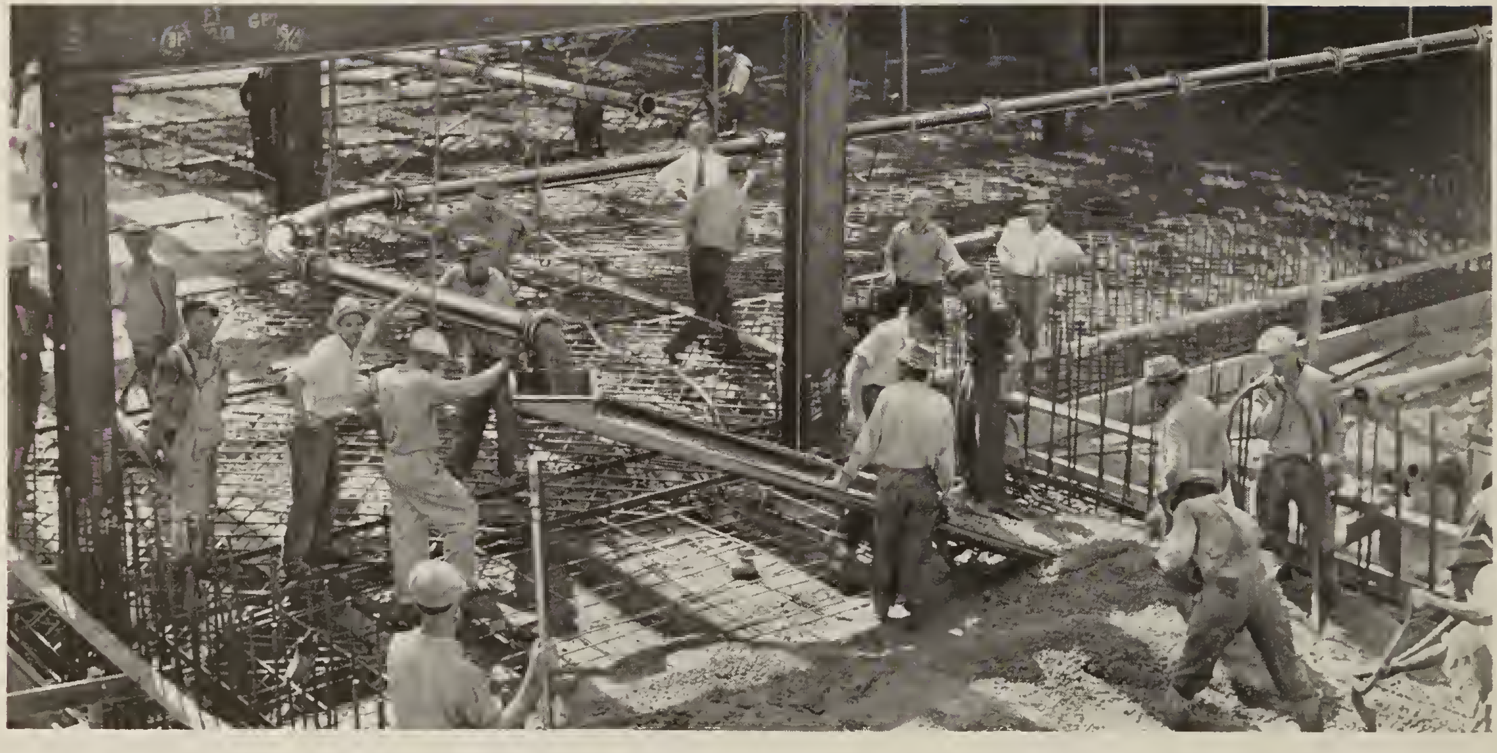
WHERE

MORE PROFITABLE JOBS AVAILABLE WITH YOUR LOWER BIDS— MADE POSSIBLE BY REX PUMPCRETE AND PIPE LINE

Rex PUMPCRETE will profitably place concrete in small yardage jobs as well as large yardage jobs. It will place it directly into forms that could only be reached with an extra long crane boom or expensive trestle — or in some cases with a hand shovel, such as:

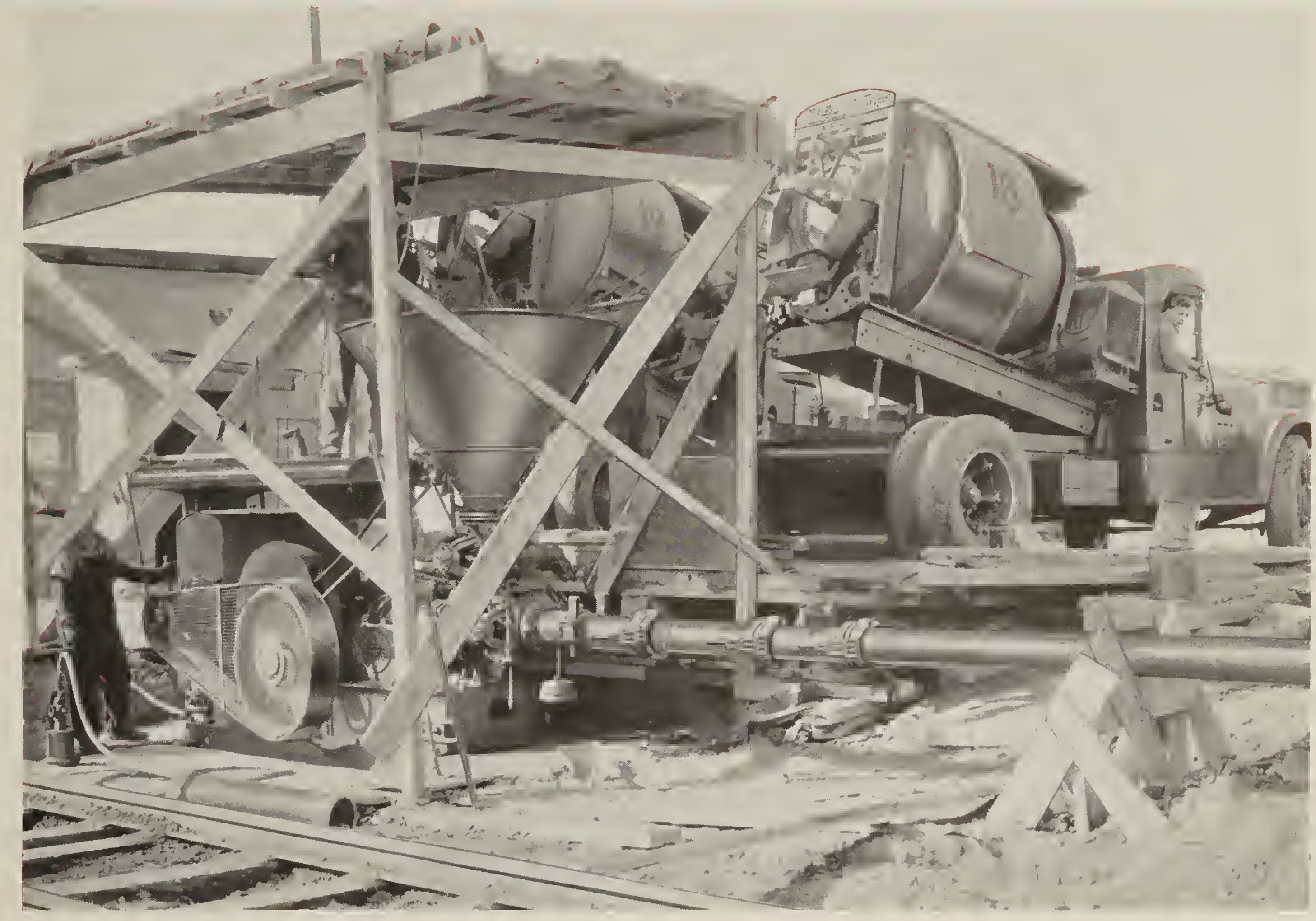
1. Underpasses, overpasses, bridges, viaducts and buildings.
2. Lock and dam jobs.
3. Canal linings, tunnel linings, sewage treatment plants, etc.

NOW YOU CAN SAFELY BID ON JOBS THAT HERETOFORE LOOKED TOO DIFFICULT FOR CONVENTIONAL PLACING EQUIPMENT



Discharge End of Pipe Line on Post Office Building in Los Angeles. Rex 200 Pumpcrete.

WHAT IS PUMPCRETE?



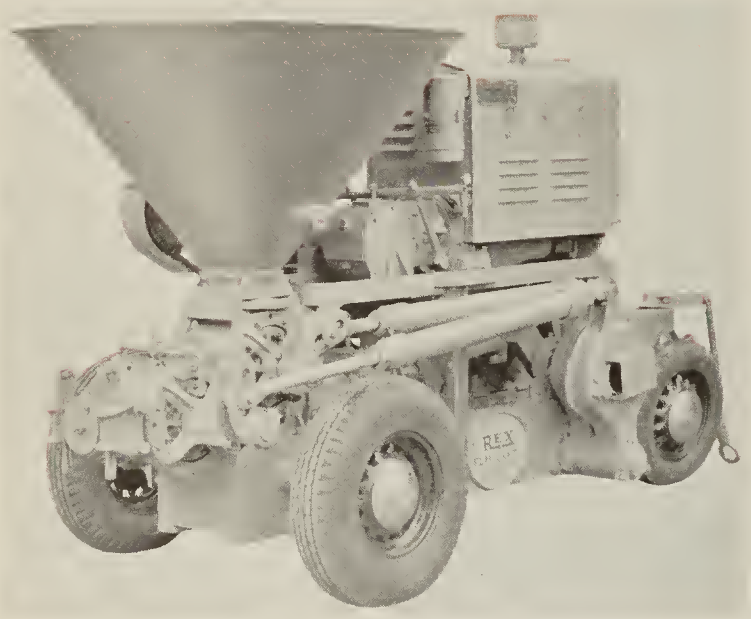
Pumpcrete and Rex Moto-Mixers Working on General Motors' New Plant in Baltimore, Md.

The concrete pump or PUMPCRETE machine is a heavy-duty, single-acting horizontal piston pump involving, as would be expected, several unusual details of construction. Except for extreme ruggedness, some of the constructions are very like a heavy-duty water pump of the piston type. A conventional crankshaft and connecting rod design is used. The cylinder is disposed horizontally with the outlet connection directly in line with the cylinder. A supply hopper is mounted above the cylinder head chamber.

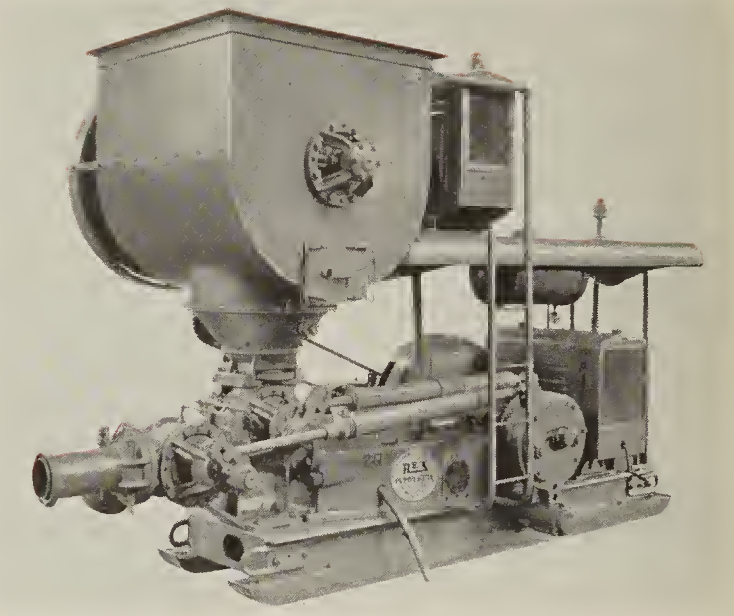
An inlet valve of very unusual design is positioned between the hopper and the chamber. An outlet valve of similar type is in the outlet passage. The inlet and outlet valves are glorified plug cocks, and they are mechanically opened and closed in timed relation to the movements of the piston. Their operating mechanism comprises very large double-acting cams mounted on the crankshaft which cooperate with rollers carried by oscillating arms. The oscillating arms are connected to the valve plug levers by valve rods which incorporate a spring relief.

WHAT IS PUMPCRETE?

SECTION 2

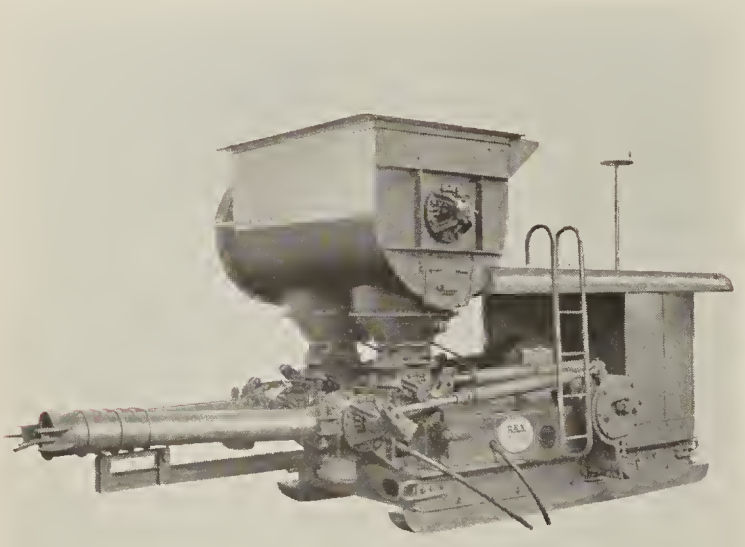


The Rex 160 PUMPCRETE

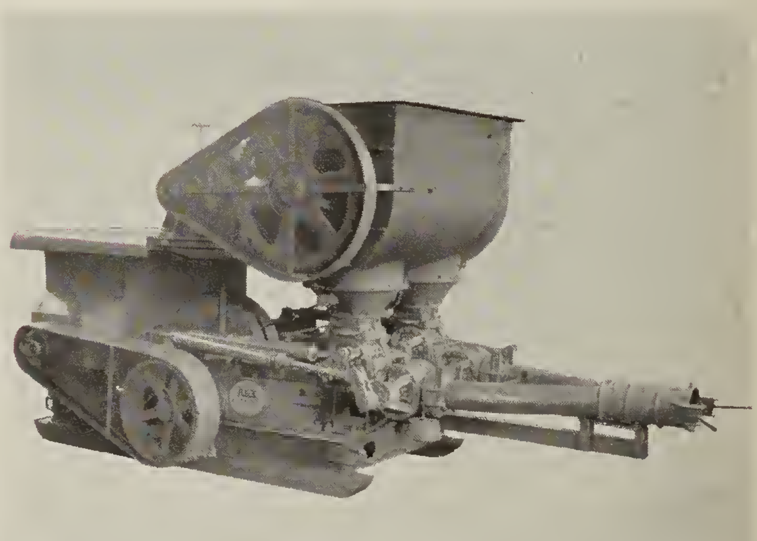


The Rex 180 Single PUMPCRETE

Mixed concrete is supplied to the hopper of the pump, and then much in the same manner as with an ordinary fluid, successive charges are drawn into a working chamber (cylinder) and these charges are then expelled into the pipe line. Each charge as it is forced into the line pushes all of the concrete in the line forward and, as concrete is relatively incompressible, a nearly equivalent amount is ejected from the end of the pipe. The pipe line is entirely filled at all times except when first starting.



The Rex 180 Double PUMPCRETE



The Rex 200 Double PUMPCRETE

SECTION 3

WHAT THE REX PUMPCRETE IS DOING

The following pages show what the Rex PUMPCRETE has done and is doing on practically every type of concrete placement job. Note the simplicity of installation and the absence of towers, buckets, cranes, or any of the other heretofore conventional placing equipment.

What the REX PUMPCRETE *is doing* SECTION 3

35TH STREET VIADUCT

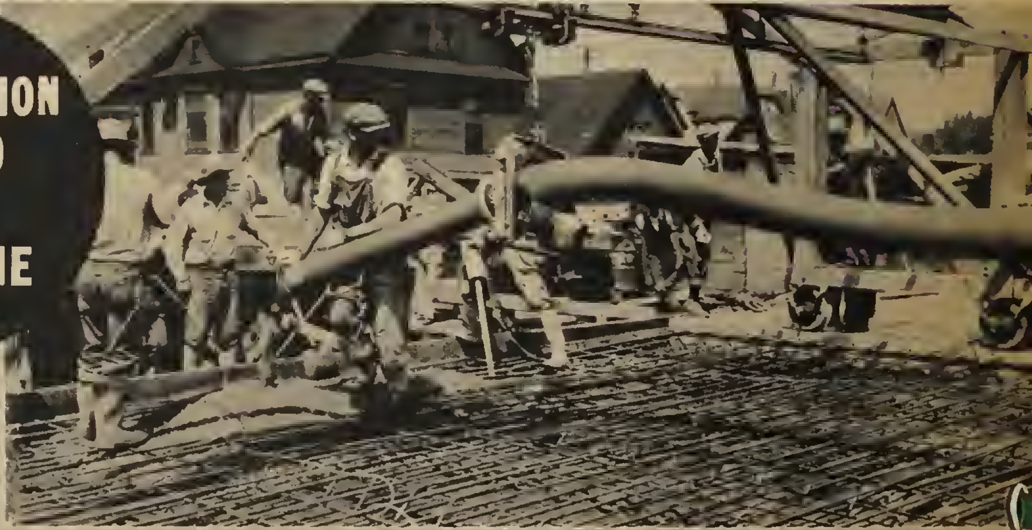
MILWAUKEE, WISCONSIN

1933

W. M. CHRISTENSEN CONSTRUCTION CO., CONTRACTORS

It took only four setups for a Rex Single PUMPCRETE to pour the 5300 yards in this viaduct. The concrete was pumped as much as 70 feet vertically and then over 500 feet horizontally. Two 27-foot slabs, 9¼ inches thick and 3700 feet long were placed easily and quickly under this ideal setup.

DISTRIBUTION AT END OF PIPE LINE



An improvised gantry crane and trolley supported the hose for spreading the concrete for the two slabs.

Concrete pumped 70 feet vertically.

Then over 500 feet horizontally.

What the REX PUMPCRETE *is doing* SECTION 3

This truck agitator body has been lowered 500 feet to feed the Rex Double PUMPCRETE.

BOULDER DAM

BOULDER CITY, NEVADA

1932-1936

SIX COMPANIES, INC., CONTRACTORS

This major engineering project, second only to the Panama Canal, involved the mixing and placing of nearly $4\frac{1}{2}$ million yards of concrete. Approximately 400,000 yds. of concrete were used in the lining of the four diversion tunnels, and this work was completed before concrete pumps were available. The dam itself required three and one-quarter million yards of concrete containing aggregate as large as 9 inches.

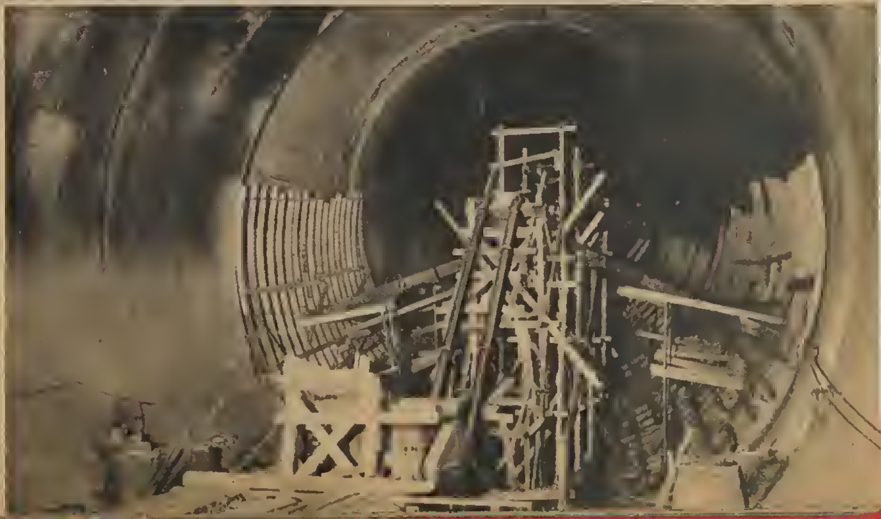
OF THE REMAINING THREE-QUARTERS OF A MILLION YARDS in the power house, intake towers, spillways, penstock tunnels, plugs for the diversion tunnels and miscellaneous work, approximately 290,000 *yards of concrete* were placed by PUMPCRETE and pipe line.

PUMPCRETE was used for most of the concrete placing that was difficult of access, and it was also used for placing concrete in the power house and elsewhere that could have been placed directly from the three-quarters of a million dollars worth of cableways.

17 Rex 4 cu. yd. Moto-Agitators worked continuously throughout the entire construction period, carrying concrete from the low level and high level mixing plants to points of pour, agitating it while en route. Much of the yardage placed with PUMPCRETE was carried to the PUMPCRETE hoppers in Rex Moto-Agitators.

A Rex Double PUMPCRETE pumping concrete up 105 feet for Spillway Collar of No. 1 Diversion Tunnel.

A Rex Double PUMPCRETE, without a Siamese connection, sending concrete through two 8-inch pipe lines to the plug of No. 3 tunnel.



What the REX PUMPCRETE *is doing*

SECTION 3

UNITED STATES POST OFFICE BUILDING

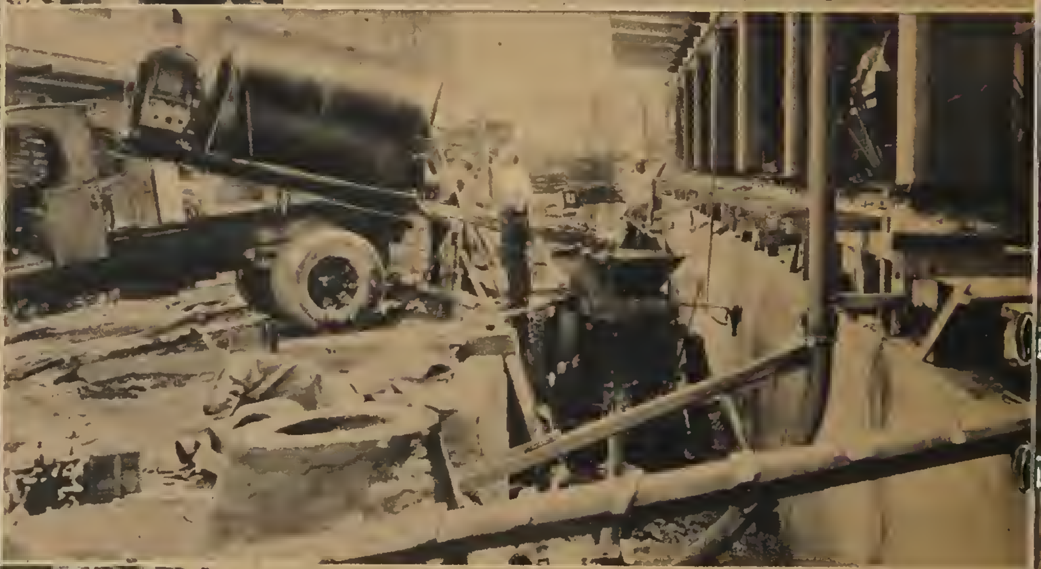
ALBANY, NEW YORK

1933

EUREKA FIREPROOFING CO., CONTRACTORS

A Single Rex PUMPCRETE finished this government contract of 5200 yards one month ahead of its schedule. Of concrete and structural steel construction, the building is five stories high. PUMPCRETE handled the whole job from a single setup. The machine, being very compact, was placed directly against the building where it afforded no interference with passing traffic.

Concrete was elevated to the roof by this simple setup.



The PUMPCRETE was located close to the building.

And 200,000 square feet of roof and floor slabs were placed in 39 days.

What the REX PUMPCRETE *is doing*

SECTION 3

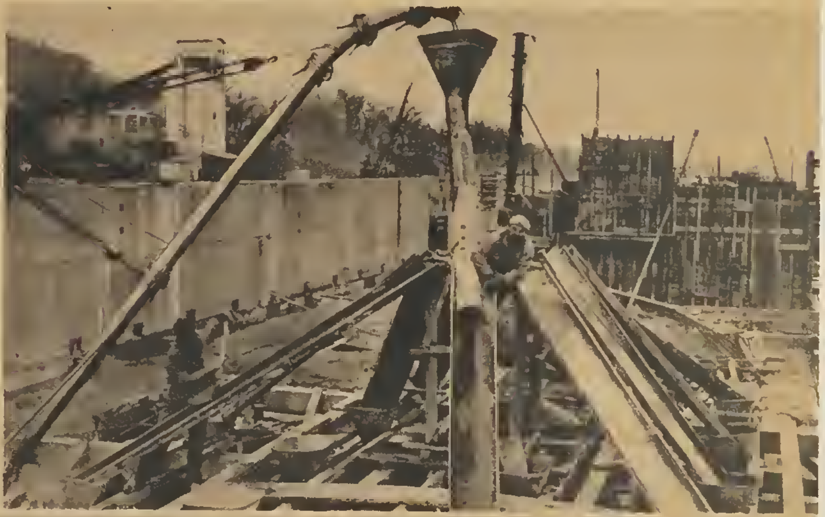
MISSISSIPPI RIVER LOCK AND DAM PROJECTS

FULTON, ILL.
FOUNTAIN CITY, WIS.
BELLEVUE, IA.

1933-34-35-36

McCARTHY IMPROVEMENT CO.
MERRITT, CHAPMAN & WHITNEY
JAMES STEWART CORP.
CONTRACTORS

A total of 196,000 cubic yards of concrete were pumped in these three jobs by Rex Double PUMPCRETES. Working from one setup on Lock No. 13, the PUMPCRETE averaged better than 5000 yards per week through the entire run. On dam No. 5, the concrete was pumped in severe sub-zero weather with no appreciable drop in temperature between the mixer and the forms. The PUMPCRETE placed 81,700 yards on Lock No. 12. Because of the ease in which it reaches the widely separated forms on jobs of this type, and because it keeps the flow more nearly continuous, the PUMPCRETE method is by far the most efficient in work of this order.



View looking downstream from upper arm of coffer showing pipe line placing concrete into form. (Lock No. 12).

Distributing the concrete from the pipe line into the pier forms. Note how nearly self-supporting the pipe line is. (Dam No. 5).

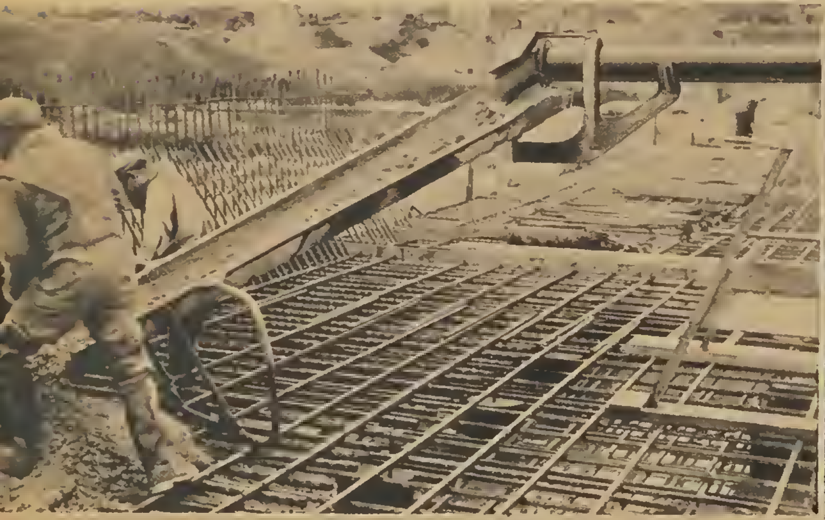
The mixing plant and the PUMPCRETE are centrally located so that the pipe line can economically reach all forms. (Lock No. 13).

The group of "elephant trunk" spouts enable forms like these to be filled evenly from one pipe line setup. (Lock No. 13).

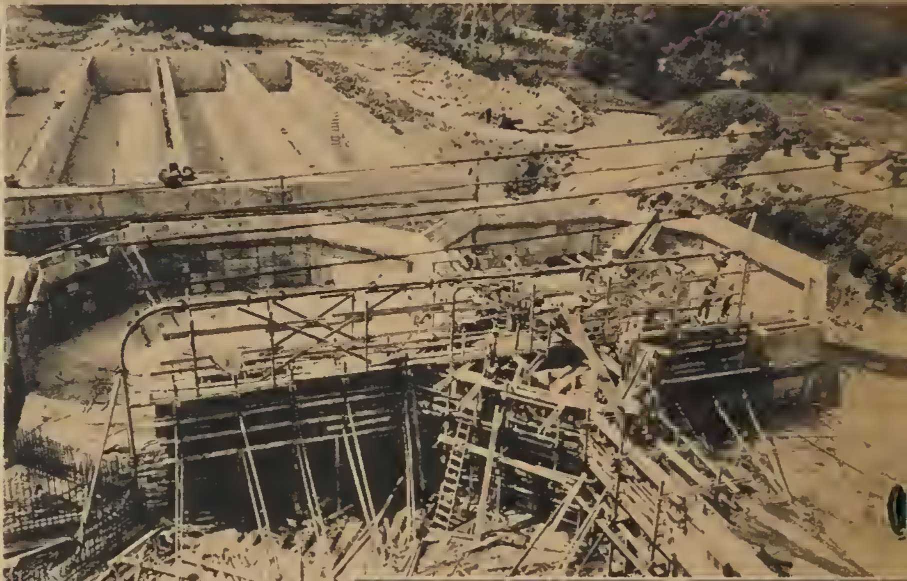
SEWAGE DISPOSAL PLANTS

MILWAUKEE, WIS. **1935** G. R. FEHR & KRAMP CONSTRUCTION CO.
INDIANAPOLIS, IND. C. R. WERMUTH & SONS—CONTRACTORS

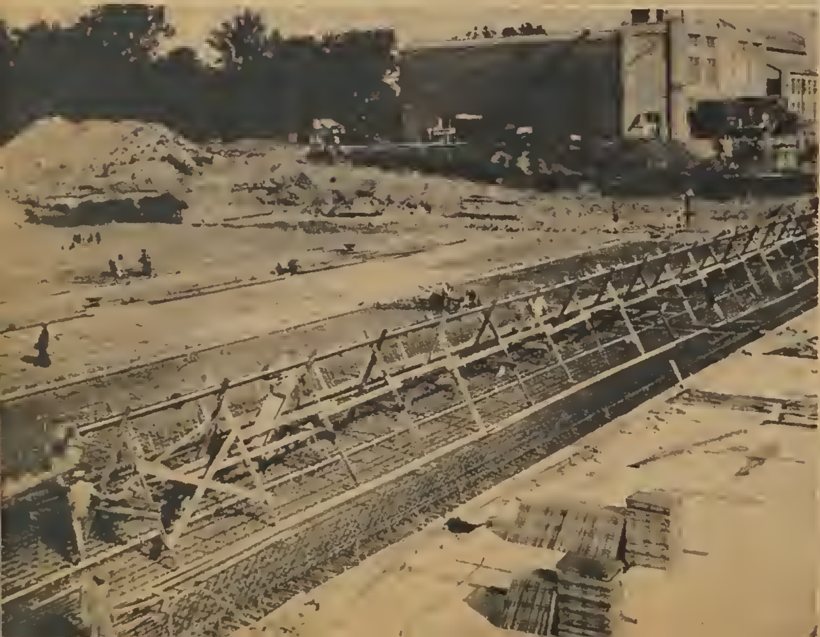
The construction problem of placing the concrete in these two similarly designed municipal projects, with their combination slabs and complicated tank walls, was solved by Rex PUMPCRETE. The pipe line easily reached the narrowest troughs and collectors without disturbing the reinforcing steel. Its extreme flexibility enabling it to reach restricted areas makes PUMPCRETE the ideal placing system on sewage disposal plant jobs.



The Rex Swivel Spout allows continuous pumping when removing the 10-foot pipe line sections—1236 cubic yards placed in one 24-hour shift. (Milwaukee)



Pipe line installations such as this offer the least amount of interference to the workmen on the project. (Indianapolis)



This slab was placed in record time by distributing the concrete over a 12-foot radius. (Indianapolis)

Pumping a narrow form in the walls of the settling basin.

What the REX PUMPCRETE *is doing*

SECTION 3

SAN FRANCISCO-OAKLAND BAY BRIDGE

SAN FRANCISCO, CAL. 1933-34-35-36

Transbay Construction Co.

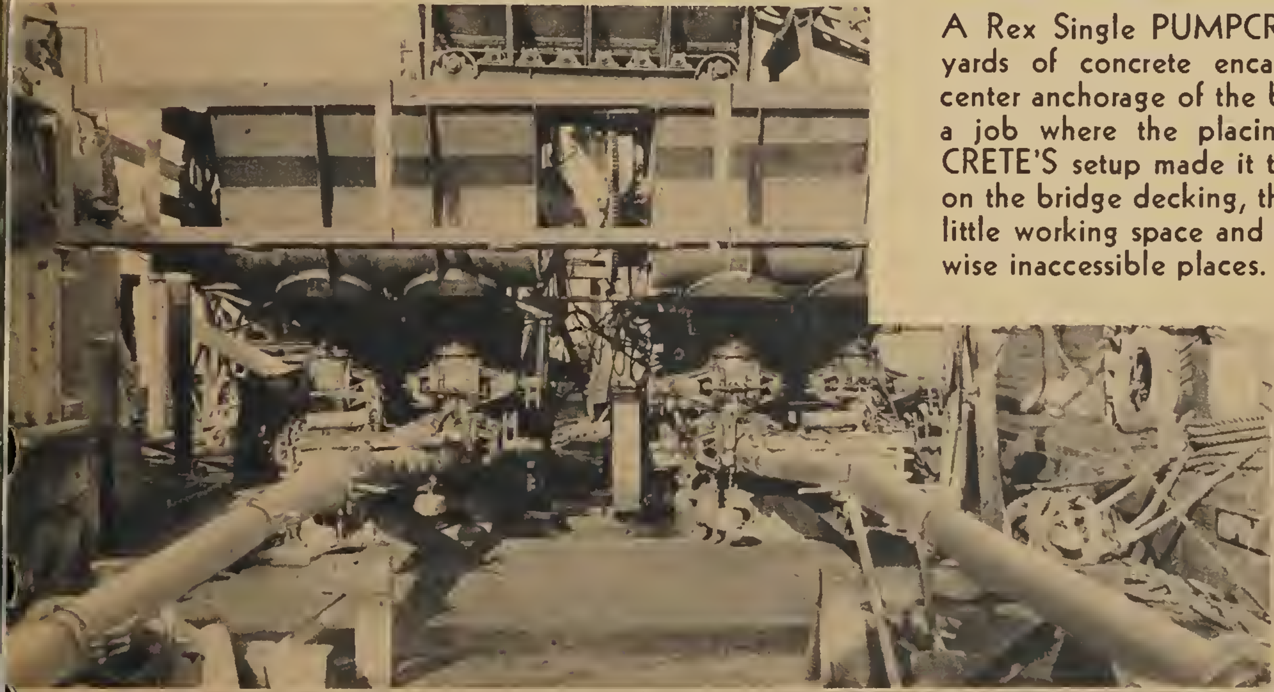
Two barges, each carrying two Rex Double PUMPCRETES, were used for the placing of 75,000 yards of concrete in the caissons for the piers. The rise and fall of the tide was counteracted by inserting hose sections in the pipe line. These PUMPCRETES were fed by 26 Rex 3½-yard Moto-Mixers, mounted on barges.

T. E. Connelly & Sons Contracting Co.

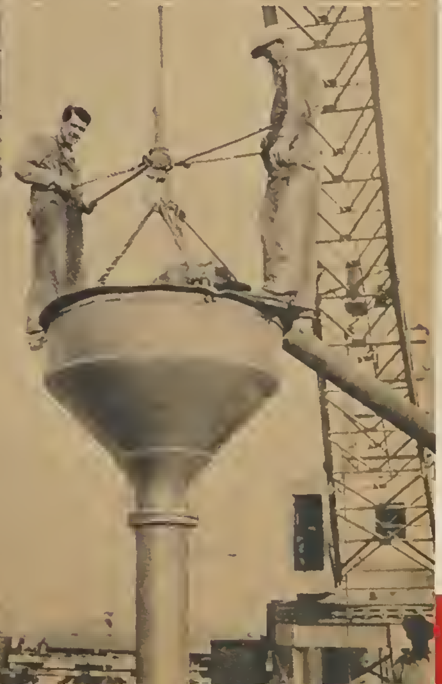
This contractor used a Rex Double PUMPCRETE to place the lining of the Vehicular Tunnel on Yerba Buena Island. This tunnel has the largest diameter of any in the world. 500 feet long with a rough excavation width of 79 feet, it was poured from one setup of the PUMPCRETE.

Bates & Rogers Construction Co.

A Rex Single PUMPCRETE pumped the 1,800 yards of concrete encasing the cables on the center anchorage of the bridge. This is definitely a job where the placing flexibility of PUMPCRETE'S setup made it the ideal system. Set up on the bridge decking, the PUMPCRETE required little working space and easily reached the otherwise inaccessible places.



A battery of Rex Double PUMPCRETES mounted on the Pumpcrete barge.



By using this tremie, → the PUMPCRETE placed unsegregated concrete 90 feet under water.

← Caisson for Pier No. 6—PUMPCRETE barge in between caisson and concrete barge.

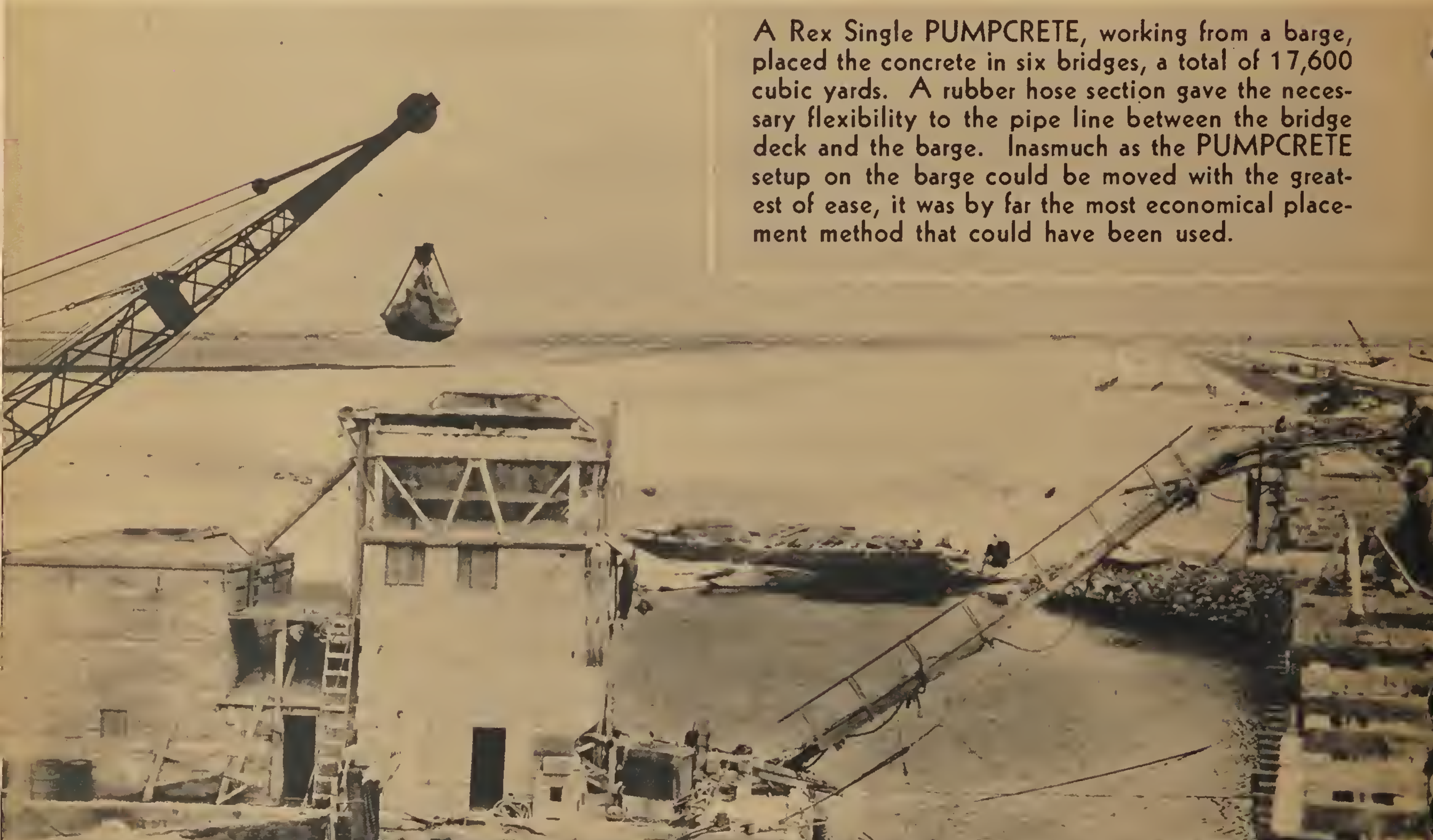
What the REX PUMPCRETE *is doing*

SECTION 3

JONES BEACH CAUSEWAY

JONES BEACH, L. I., N. Y. **1934** THE ARUNDEL CORP., CONTRACTORS

A Rex Single PUMPCRETE, working from a barge, placed the concrete in six bridges, a total of 17,600 cubic yards. A rubber hose section gave the necessary flexibility to the pipe line between the bridge deck and the barge. Inasmuch as the PUMPCRETE setup on the barge could be moved with the greatest of ease, it was by far the most economical placement method that could have been used.



Located on the barge, the PUMPCRETE was able to reach every form on the job by merely pulling the barge from one side of the inlet to the other.

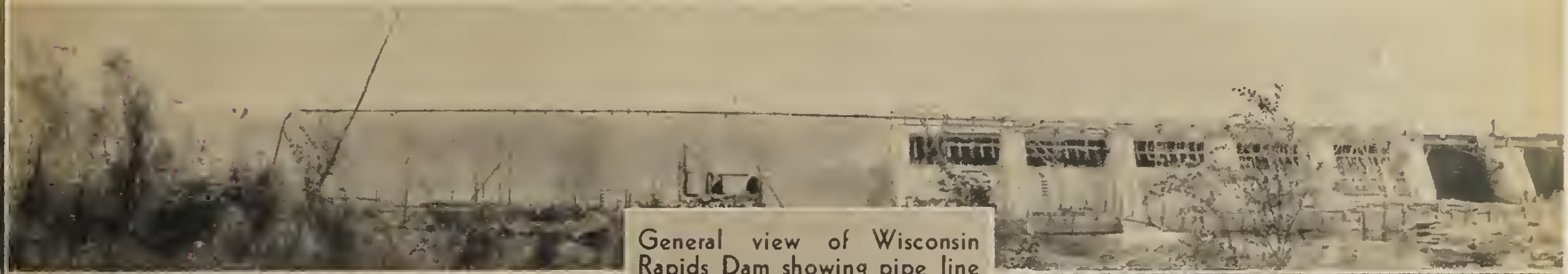
What the REX PUMPCRETE *is doing*

SECTION 3

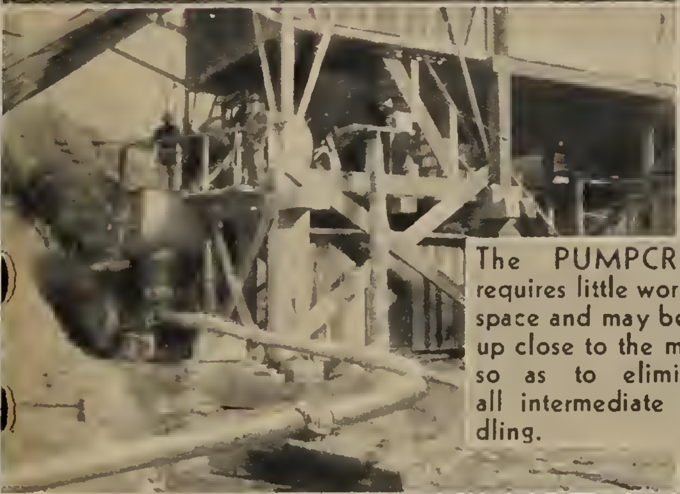
HYDRO-ELECTRIC DAMS AND DEVELOPMENT

LONDON, WEST VA., BOSO & RITCHIE, CONTRACTORS
HOLTWOOD, PENNSYLVANIA, THE ARUNDEL CORP.
WISCONSIN RAPIDS, WIS., CONSOLIDATED WATER POWER & PAPER CO.

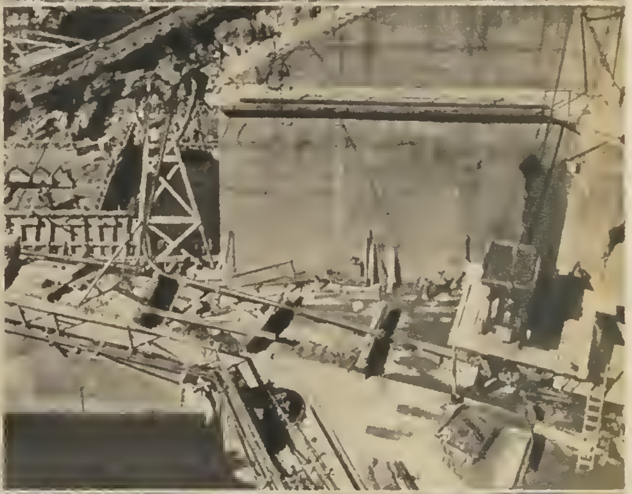
A Rex Double PUMPCRETE and two Rex Single PUMPCRETES handled the placing of 50,000 yards of concrete in these three projects. The use of a main arterial pipe line with auxiliary lines to take concrete to various points in the forms made it possible to pump to all wall sections, bulkheads and spillways and with a minimum of pipe line handling — thereby making for a more continuous pour.



General view of Wisconsin Rapids Dam showing pipe line reaching across the dam.



The PUMPCRETE requires little working space and may be set up close to the mixer so as to eliminate all intermediate handling.



The PUMPCRETE setup near the new diversion wall. One pipe line is connected to finish the placement while the other is ready for a quick change-over. (Holtwood, Pa.)

The PUMPCRETE leaves a "clean hole" and does not clutter up the job with equipment that so often retards rapid progress. (London, West Va.)

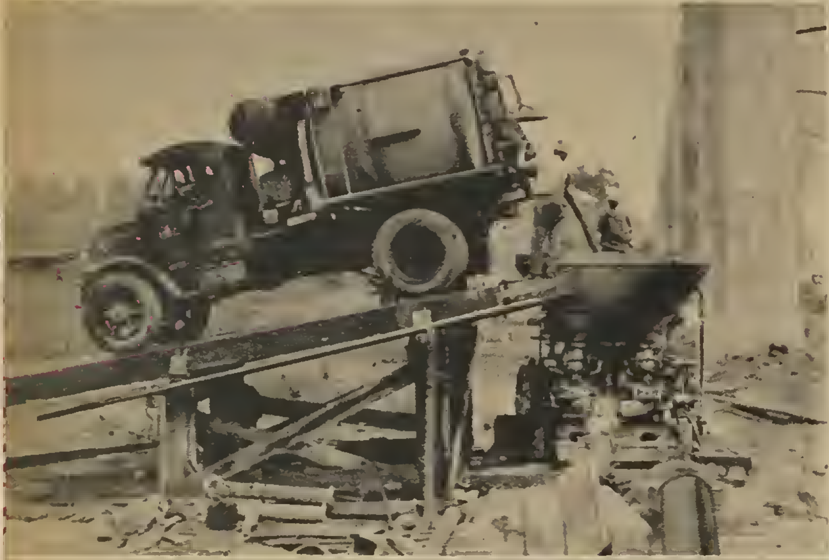
View showing pipe line crossing the river. (Holtwood, Pa.)

What the REX PUMPCRETE *is doing*

SECTION 3

TRIBOROUGH BRIDGE

NEW YORK, N. Y.
1935-36



Concrete is placed in the Rex PUMPCRETE by Rex Moto-Mixers.

VIADUCT CONSTRUCTION CO.

This contractor was faced with the problem of placing concrete for the many piers both on the approaches and the span of this record-breaking construction project. He solved the problem by using a Rex Double PUMPCRETE to pump the concrete through a pipe line, part of which was over 350 feet of water, to a barge from which a crane and bucket completed the job of final placement. His best day's run was when he mixed and delivered 360 cubic yards of concrete to twelve scattered piers in ten hours . . .

From the truss it goes to a hopper on a barge from which it is taken in buckets to the forms.

Part of the pipe line is over 350 feet of light steel truss.

POIRER-McLANE CO. & CORBETTA CONSTRUCTION CO. — 72,000 YDS.

These two contractors held separate contracts for the placing of the deck concrete on the Manhattan Approach and Randall's Island Junction. Both used the Rex PUMPCRETE as their placement systems — both finished ahead of schedule.

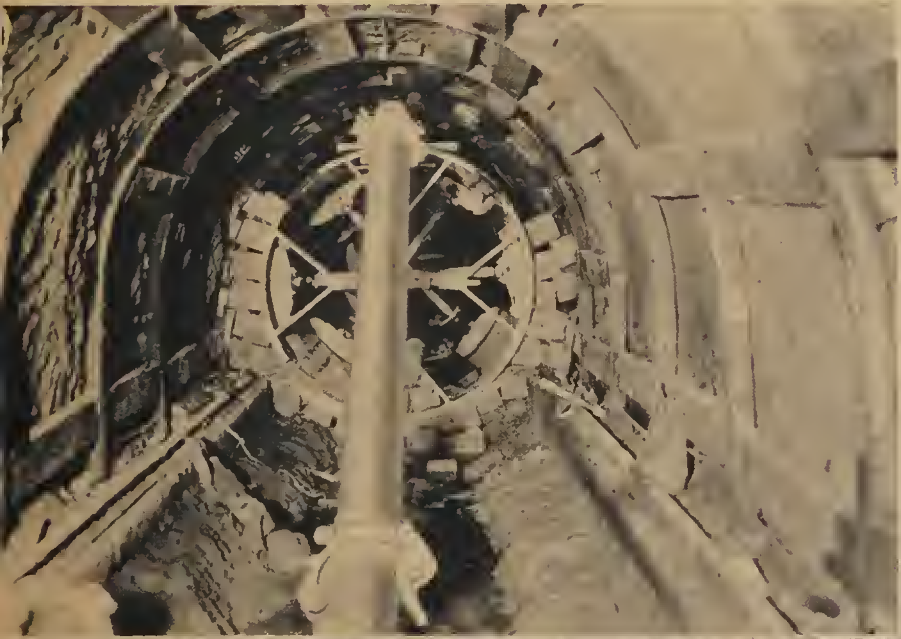
What the REX PUMPCRETE *is doing*

SECTION 3

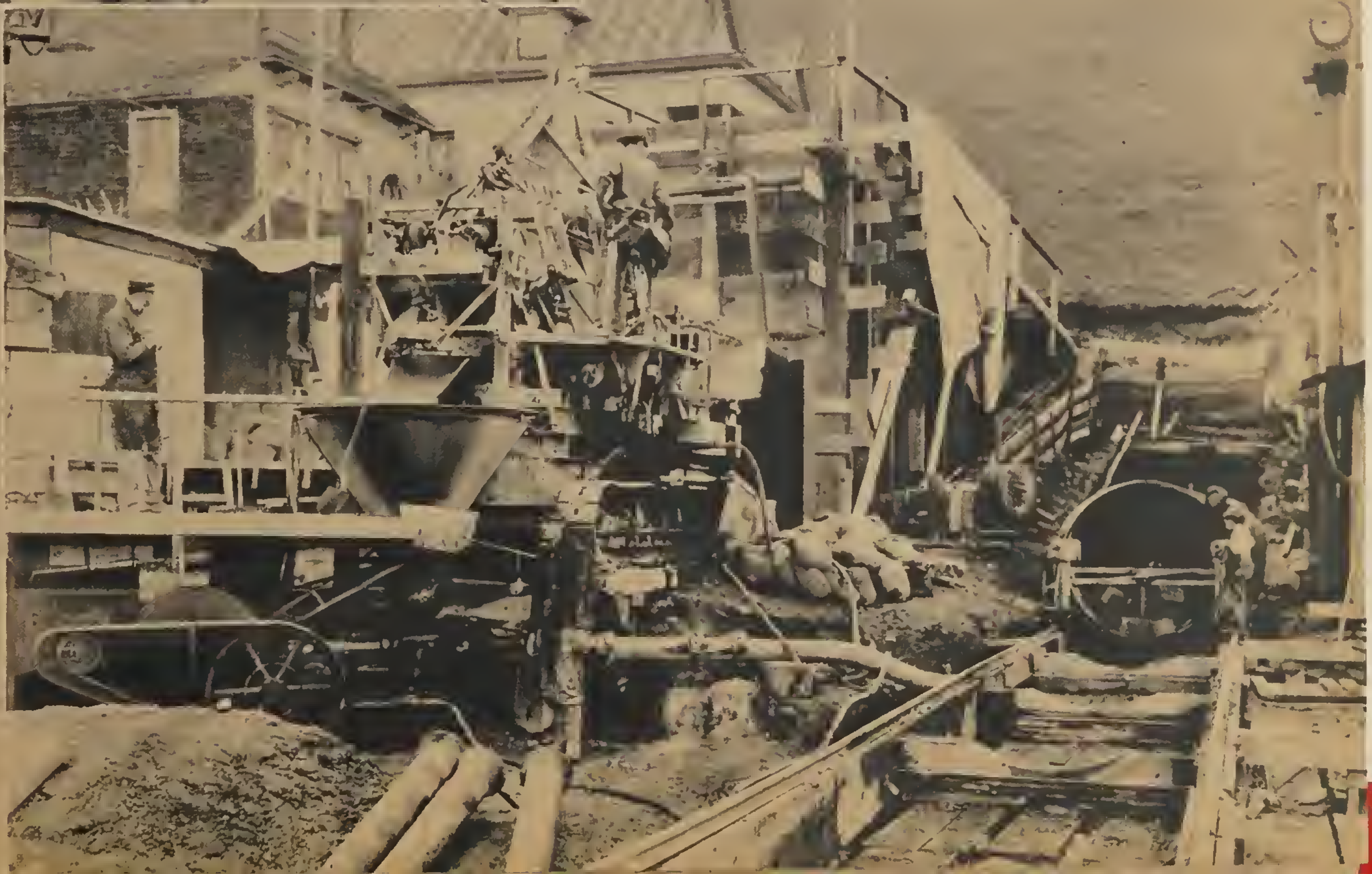
CRYSTAL SPRINGS TUNNEL

SAN FRANCISCO, CAL. **1935** BARRETT & HILP, CONTRACTORS

A Rex Single PUMPCRETE pumped 4000 yards of concrete in lining this 2,200-foot tunnel. As the tunnel is only five feet in diameter, it afforded a small working space. The PUMPCRETE was placed at either end and the pipe line was laid through half of the length of the project. This enabled the work to be done from two setups.



PUMPCRETE pipe line placing lining for tunnel. Note that despite the close quarters, the pipe line does not get in the way.



One of the PUMPCRETE setups on the outside of the tunnel.

What the REX PUMPCRETE *is doing*

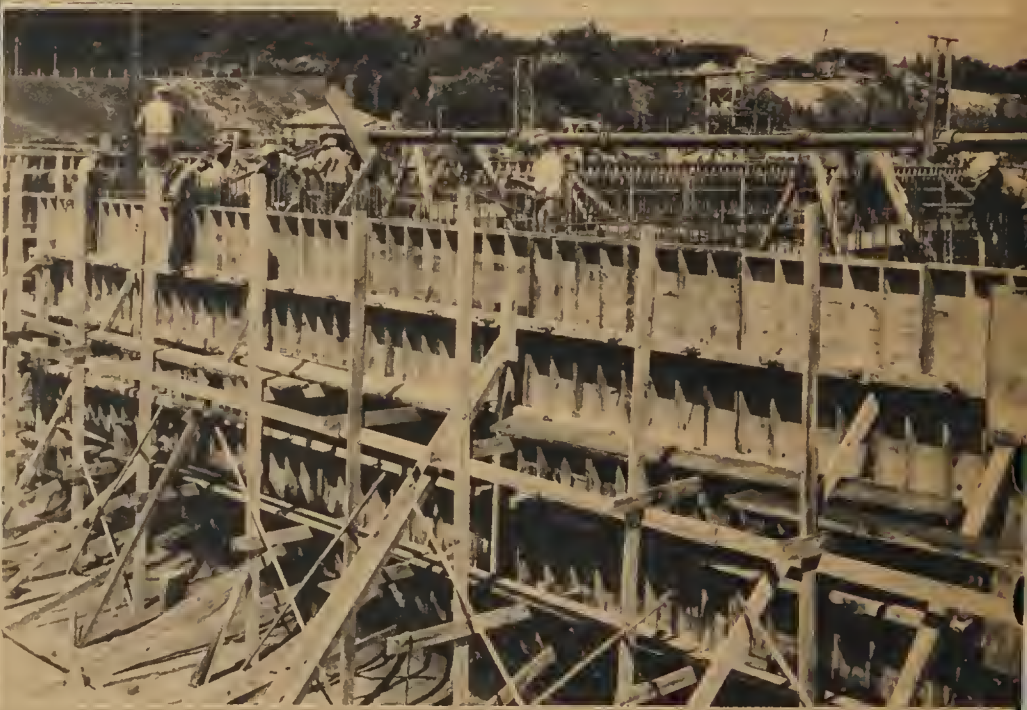
SECTION 3

MILWAUKEE FILTRATION PLANT

MILWAUKEE, WIS. **1935** KRAMP CONST. CO.—CONTRACTOR

After the Kramp Construction Co.'s experience with Rex PUMPCRETE in placing the concrete on Milwaukee's sewage disposal plant proved so successful they adopted this method for use in pumping the 38,400 cubic yards in Milwaukee's new filtration plant. The filtration beds, covering 27 acres, were placed from a single setup of a Rex Double PUMPCRETE.

The central setup, located close to the job, easily handled pipe lines over 1000 feet in length.



Placing concrete in the walls directly from the pipe line.

It kept the men busy taking the concrete away from the end of the pipe line while placing the slab of the filter beds.

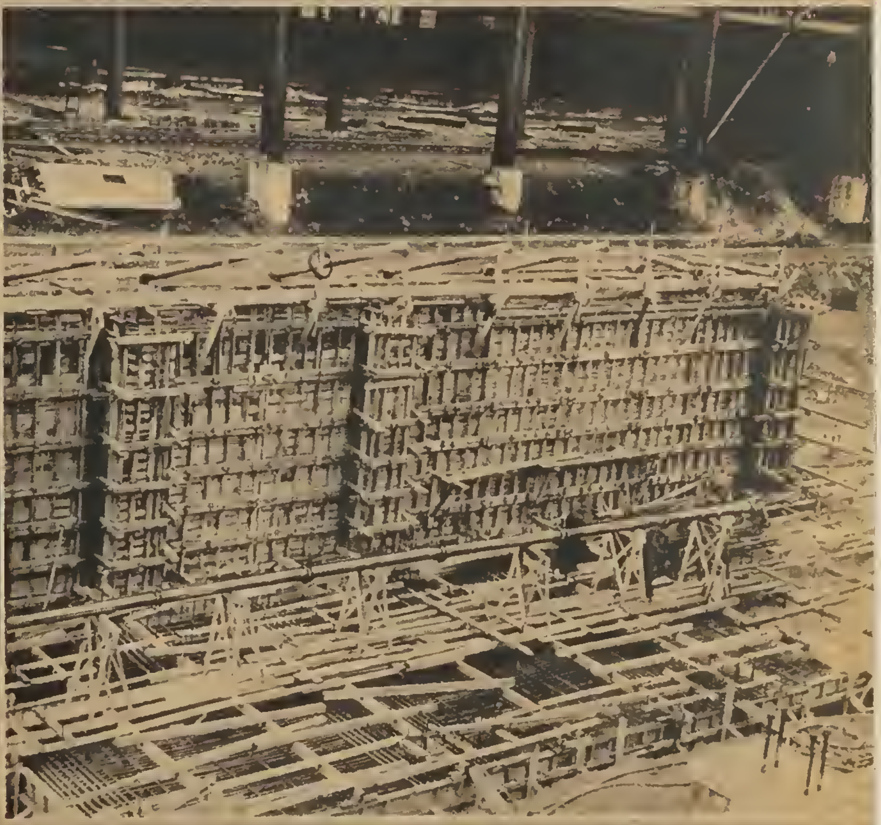
FOUNDATIONS AND SLABS FOR INDUSTRIAL BUILDINGS

YOUNGSTOWN SHEET & TUBE HOT STRIP MILL	1934	YOUNGSTOWN, OHIO RUST ENGRG. CO.—CONTRACTOR
CARNEGIE-ILLINOIS STEEL CO.	1936	HOMESTEAD, PA. ARTHUR G. McKEE—CONTRACTOR

When the PUMPCRETE was installed on the strip mill foundation contract, it was faced with two problems — first, the aggregate to be used was to be slag from industrial furnaces; and, second, the placing schedule at that time was ten days behind. Twenty days after the Rex Single PUMPCRETE was started the loss in operation was made up and the schedule was being maintained; in forty days the schedule was ten days ahead of the estimated placement program.

By pumping the 17,000 yards in the slab and foundations of the steel mill addition, the Rex Single PUMPCRETE lived up to all expectations and was able to add another name to the long list of satisfied PUMPCRETE users.

The central mixing plant used on the Carnegie-Illinois Steel foundation contract.



The pipe line, carried on light scaffolding, is ready to pour the slab. (Carnegie-Illinois.)

What the REX PUMPCRETE *is doing*

SECTION 3

INDIAN CREEK FLOOD CONTROL

COUNCIL BLUFFS, IOWA **1936** UNION CONSTRUCTION CO., CONTRACTORS

A Rex Single PUMPCRETE pumped the 17,500 yards required on this part of the national flood control program. The total length of the project was 7300 feet. PUMPCRETE setups were made at intervals along the bank of the ditch and concrete was pumped in both directions. Pipe line was laid on finished concrete or along the bank; then carried over the section to be poured on horses so that a twenty foot spout could be used at the end of the line for distribution.

The invert was pumped first

Then the walls and top slab are poured from one setup of the pipe line.

By elevating the end of the pipe line, concrete is spouted into the forms without having the entire pipe line supported by scaffolds.

WITH THE PUMPCRETE ON THE COLORADO RIVER AQUEDUCT

REX PUMPCRETES are placing nearly 70% of the MILLION AND ONE-HALF YARDS of concrete going into the ninety-one miles of tunnels required by this enormous water supply project. Walsh Construction Company has a contract for ten miles of tunnels, including those of the Colorado River, Copper Basin and Whipple Mountain. The tunnel lining has almost reached completion and there has been a notable success through the use of Rex Double PUMPCRETE.

The contract including seven miles of lining in the east portion of the Iron Mountain tunnel and the Coxcomb tunnel is held by the Winston Brothers Company. Here also, a Rex Double PUMPCRETE has brought the project up to a point where, at the present time, the lining is approximately 60% completed. The date for the completion of these contracts was December 15, 1938, but the PUMPCRETES are finishing ahead of the schedule.

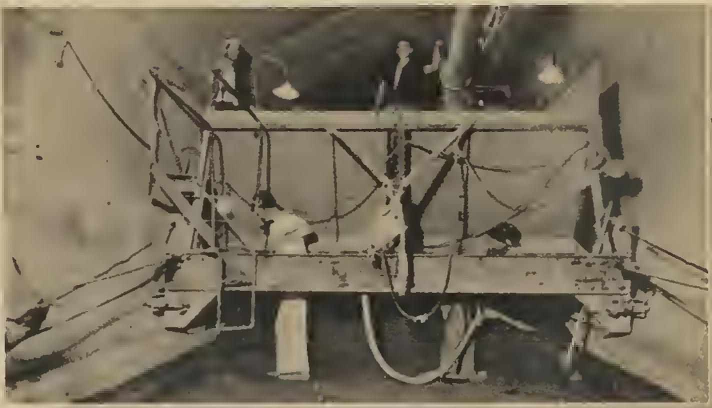
Six Special Rex Tunnel Lining units, mounted on self-propelled cars and consisting of One-Yard Rex Mixer and Rex Single PUMPCRETE are owned and operated by the *Metropolitan Water District* and are mixing and placing the lining in the East and West Coachella tunnels, whose combined length is over thirty-one miles. This, by far the largest section of the whole chain of tunnels, is over 60% completed, and will also be done long before the completion date set when the project was begun.

Owing to the unusual conditions existing in the tunnel through the San Jacinto Mountain, it is imperative that this tunnel be lined with the greatest possible speed. To meet these conditions, the *Metropolitan Water District* purchased an additional two special Rex Tunnel Lining units, mounted on self-propelled cars and each unit consisting of one Dual Drum Rex 56-S Mixer and Rex Double PUMPCRETE.

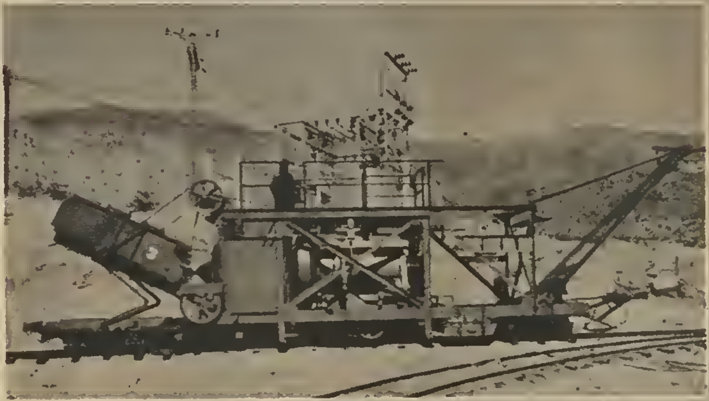
The Rex PUMPCRETE is justifiably proud of the part it is playing in this world-renowned project and presents these figures as proof that it has definitely established itself as an accepted construction method:

There are 91 miles of tunnels, totaling 1,444,530 cubic yards of concrete, and the PUMPCRETE is being, or will be used to pump the following yardages:

1. Walsh Construction Co.	150,027 yds.
2. Winston Brothers Co.	140,699 "
3. Metropolitan Water Dis. (Coachella Tunnels)	604,397 "
4. Metropolitan Water Dis. (San Jacinto Tunnel)	202,224 "
Total by PUMPCRETE	1,097,347 cubic yards
Total by all other methods	347,183 cubic yards



Placing invert concrete by pumping from the PUMPCRETE machine through the overhead pipe to the hopper, from which it is fed into the invert.



Special Single PUMPCRETE machine assembled and ready for use in the Wide Canyon—West Coachella tunnel.

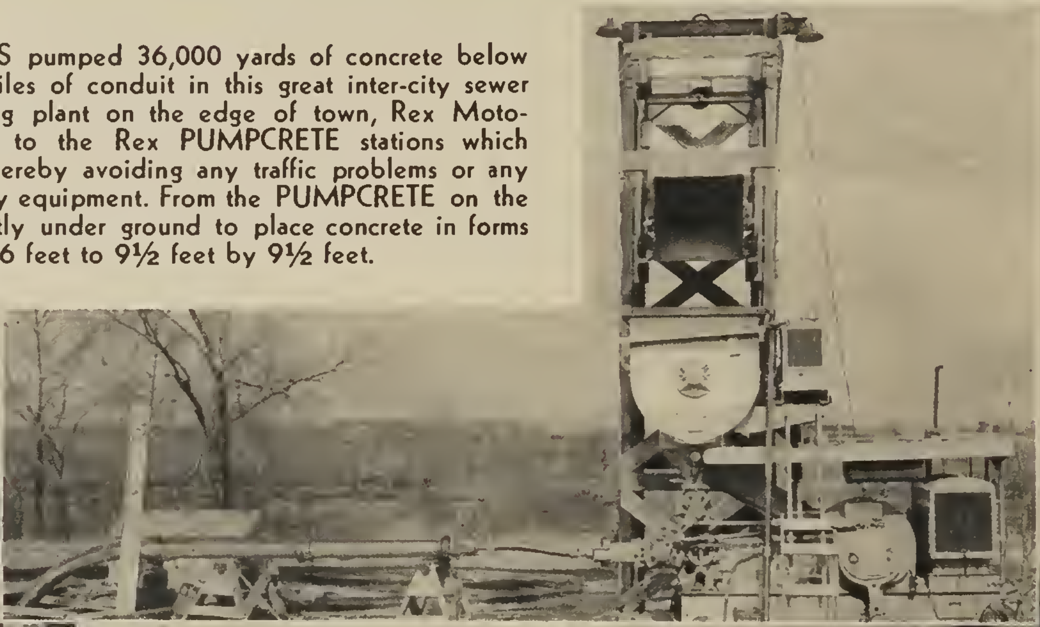
Special Double PUMPCRETE being assembled at west portal of San Jacinto tunnel.

What the REX PUMPCRETE *is doing*

METROPOLITAN DISTRICT TUNNEL SYSTEM

MINNEAPOLIS, MINN. 1935-36 CITY SEWER DEPT.—CONTRACTOR

Three Rex Single PUMPCRETES pumped 36,000 yards of concrete below the ground to line the many miles of conduit in this great inter-city sewer program. From a central mixing plant on the edge of town, Rex Moto-Mixers delivered the concrete to the Rex PUMPCRETE stations which occupied very little space — thereby avoiding any traffic problems or any cluttering of the streets with bulky equipment. From the PUMPCRETE on the surface, the pipeline went directly under ground to place concrete in forms ranging in size from 3¼ feet by 6 feet to 9½ feet by 9½ feet.



PUMPCRETE stations like the above proved the efficiency of this compact placing system on municipal sewer jobs.

The big ones were poured economically, too.

A small space to work in, but the PUMPCRETE did it easily and in record time.

The pipe line utilizes only 3% of the total available working space in this conduit.

What the REX PUMPCRETE *is doing*

SECTION 3

BONNEVILLE DAM

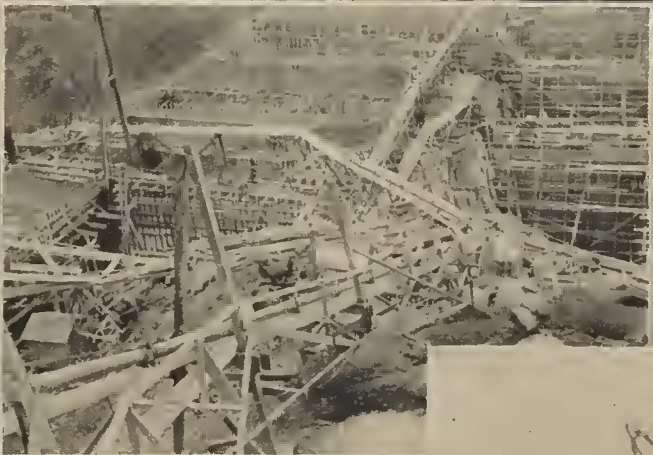
BONNEVILLE, OREGON

1934-35

GENERAL CONSTRUCTION CO. & J. F. SHEA CO., CONTRACTORS

This, the Northwest's second largest dam, contains over a million yards of concrete. Of this total, three Rex Double PUMPCRETES placed over 125,000 cubic yards. Again, with the help of arterial pipe lines, the PUMPCRETES were able to pump concrete over wide areas from one setup

Two of the setups of the Double PUMPCRETES.



The third setup for pumping to the abutment wall.

Arterial pipe lines in place for a continuous run.

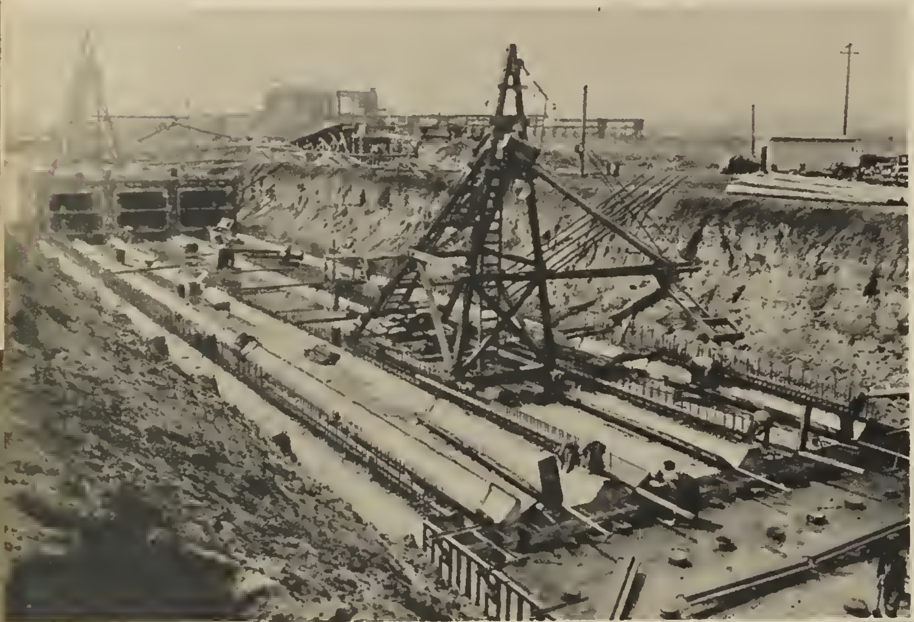
Pumping to the forms of the piers for the new railroad bridge which was part of this project. Note the extra line in place.

What the REX PUMPCRETE *is doing*

SECTION 3

CAHOKIA CREEK DIVERSION AND EAST ST. LOUIS DRAINAGE

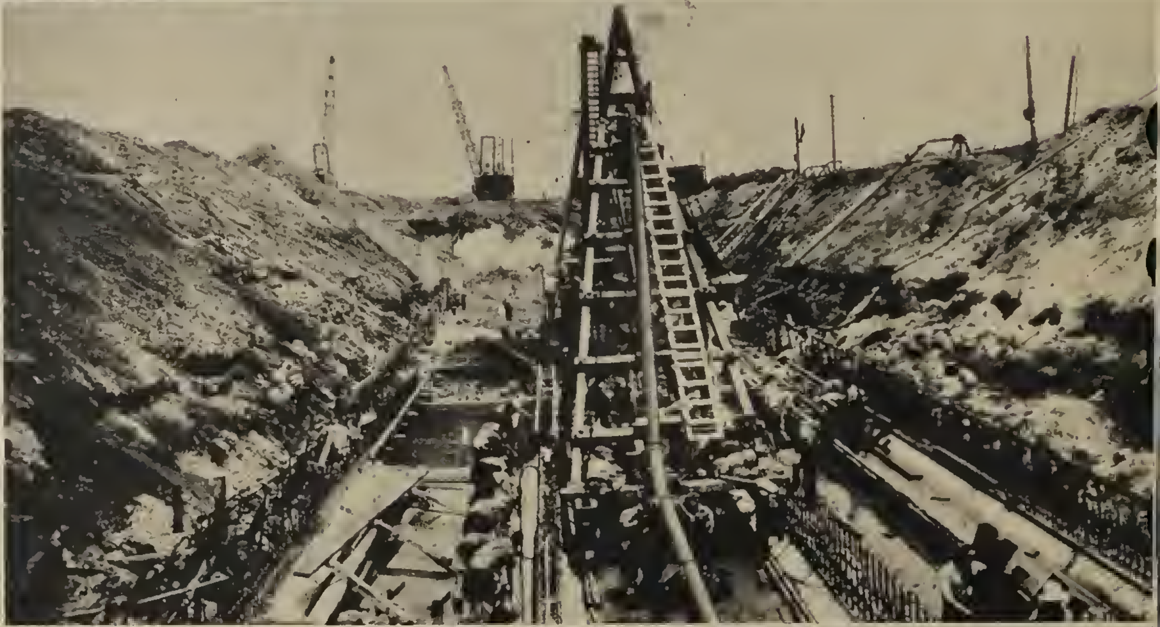
EAST ST. LOUIS, ILL. **1935** G. L. TARLTON—CONTRACTOR



Two installations took care of the placing of 33,000 yards in this Diversion Project. One Rex Double PUMPCRETE placed the concrete in the main pumping station and the box conduit outlet below and the other installation pumped the triple box conduit. This last setup was unique in that it was done by two pipe lines. One line was laid to the distributing derrick on top of the conduit while the other went to the derrick on the invert below it. Pumping was done by alternating between the conduit proper and the invert.

Concreting of the drainage conduits was carried forward in two stages. Distribution derricks moved forward on the completed invert and on the top. Concrete was pumped to the chute hoppers at the top of the derricks.

Distribution with the aid of swivel chutes makes it easy to pour the walls and top of the triple box conduit.



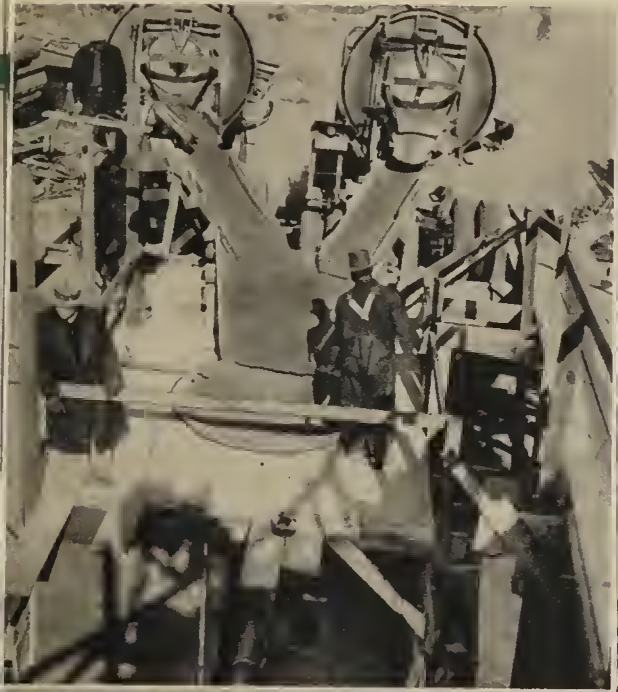
Continuous operation maintained by mounting the pipe line on a movable derrick.

What the REX PUMPCRETE *is doing*

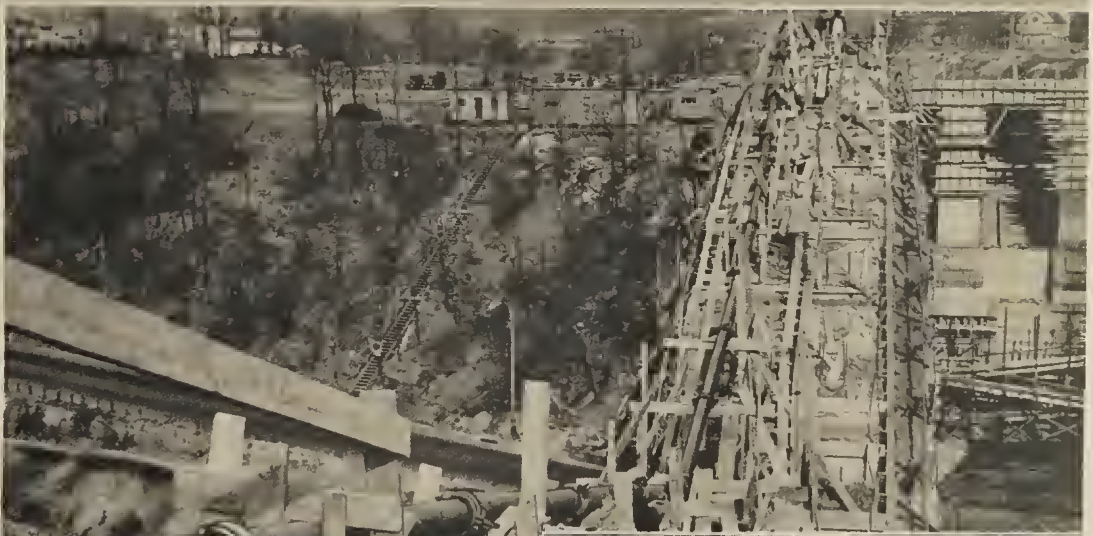
SECTION 3

CONCRETE ARCH BRIDGE

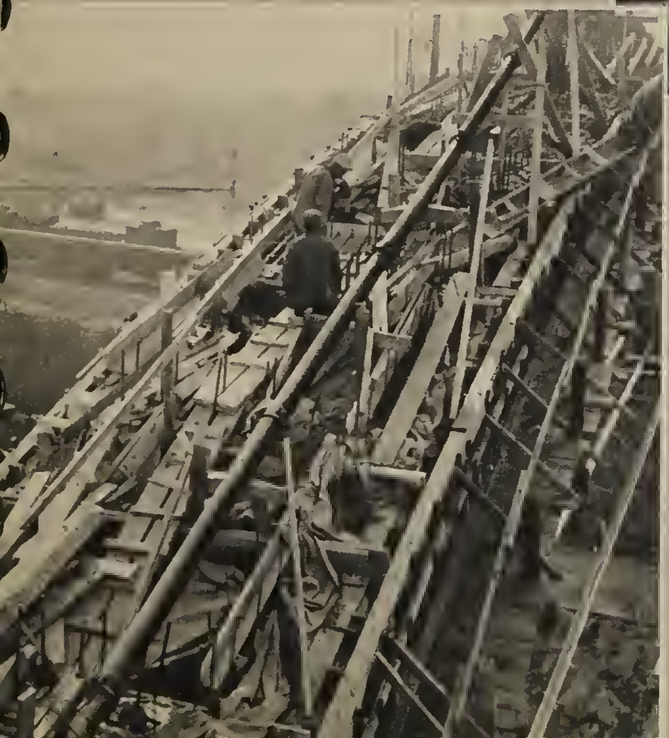
29TH STREET—BALTIMORE, MD. **1936** POTTS & CALLAHAN, CONTRACTORS



A Rex Single PUMPCRETE handled the 5000 yards in this concrete arch bridge without the difficulty that usually accompanies a placing job of this type. As the arches were very high above the ground, the adaptability of the pipe line to this variation of formwork made complicated placing machinery unnecessary. The arches were poured in alternate sections and it was possible to change from one section to the other without loss of time.

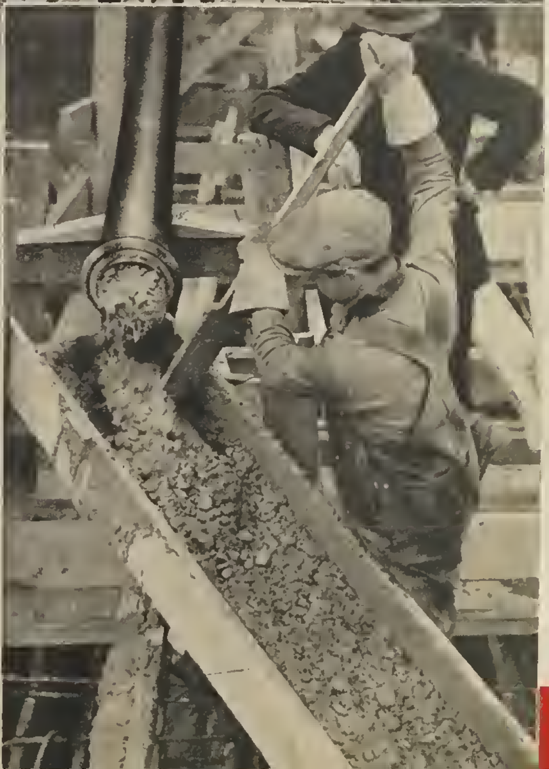


Two Rex Moto-Mixers feeding concrete into the hopper of the PUMPCRETE.



The pipe line easily is adapted to the shape of the formwork.

The pipe line in place for pumping the arches. The ten-foot sections made it possible to disconnect and place concrete at any point on the arch.



Final placement — the use of a light movable spout enables the men to fill the whole section without moving the pipe line.

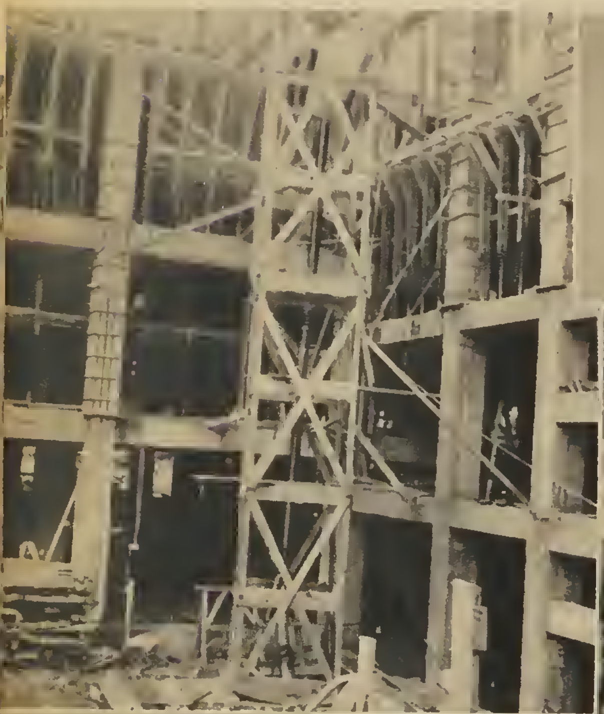
What the REX PUMPCRETE *is doing*

SECTION 3

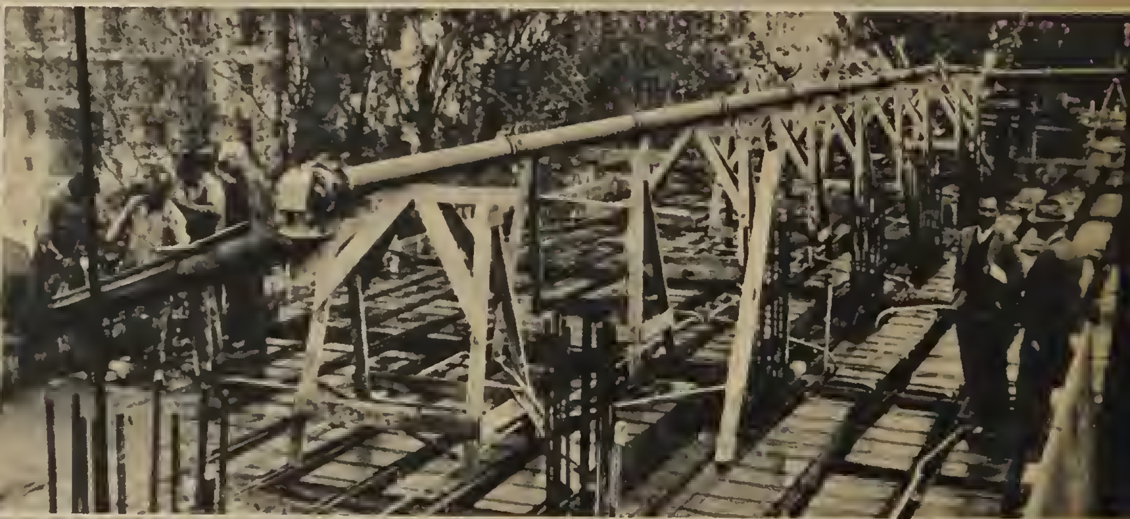
ECONOMICS BUILDING

WASHINGTON, D. C. **1936** JOHN McSHAIN CO., CONTRACTOR

A Rex Single PUMPCRETE placed 3600 yards in this reinforced concrete building. The use of the pipe line eliminated the need for towers and hoists for concrete delivery. Rex Moto-Mixers delivered the concrete to the PUMPCRETE.



The pipe line reaches the top floor by means of a light scaffold.



Placing concrete in the spandrel beams.

Pumping to the columns.

Placing the slab with a twelve-foot swivel chute.

What the REX PUMPCRETE *is doing*

SECTION 3

MUSKINGUM VALLEY FLOOD CONTROL DAMS

1936

BOLIVAR, OHIO	MINDER CONST. CO., CONTRACTOR
COSHOCTON, OHIO	G. M. BREWSTER & SONS, CONTRACTOR
LOUDONVILLE, OHIO	WINSTON BROS. CO., CONTRACTOR
PERRYSVILLE, OHIO	NEWHALL HERKNER CO., CONTRACTOR
BEACH CITY, OHIO	WILLIAM EISENBERG'S SON, CONTRACTOR

The PUMPCRETE has established an enviable record in its handling of the 117,500 cubic yards of concrete contained in this section of the Ohio State flood control program. Encountering almost every conceivable placement problem in its work on the above dams, the PUMPCRETE finished all but one from one setup—at times pumped down sixty foot drops, at others up 110 foot inclines—placed diversion tunnels, spillway slabs, retaining walls and buildings with equal ease and efficiency. Here its superiority in this type of construction has been definitely proved.

The central mixing plant and PUMPCRETE setup from which the pipe line travels down a sixty foot incline. (Bolivar Dam)

Pipe line in place for placement of the core wall. (Mohawk Dam—Coshocton, Ohio)

No difficulty was met in pumping down this steep slope nor did the pipe line need any but the most simple support. (Mohicansville Dam, Loudonville, Ohio)

Concrete is pumped up 110 feet to the top of this vertical shaft.

OUTER DRIVE IMPROVEMENT

CHICAGO, ILL. 1936 O'NEIL CONSTRUCTION CO., CONTRACTORS

With 18,000 yards still to be placed, a Rex Single PUMPCRETE has already pumped 5,000 yards on this City Improvement Project which consists of a combination of retaining walls, slabs and bridge decking. Though this job has few large pours and covers a large acreage, it is handled easily by using arterial pipe lines approximately 1,000 feet in length.

Two pipe lines to the opposite ends of the job eliminate delays.

From a mixing plant on the edge of the job, the pipe line reaches to every part of the project.

The PUMPCRETE is placed close to the job but it does not interfere with any of the building procedure.

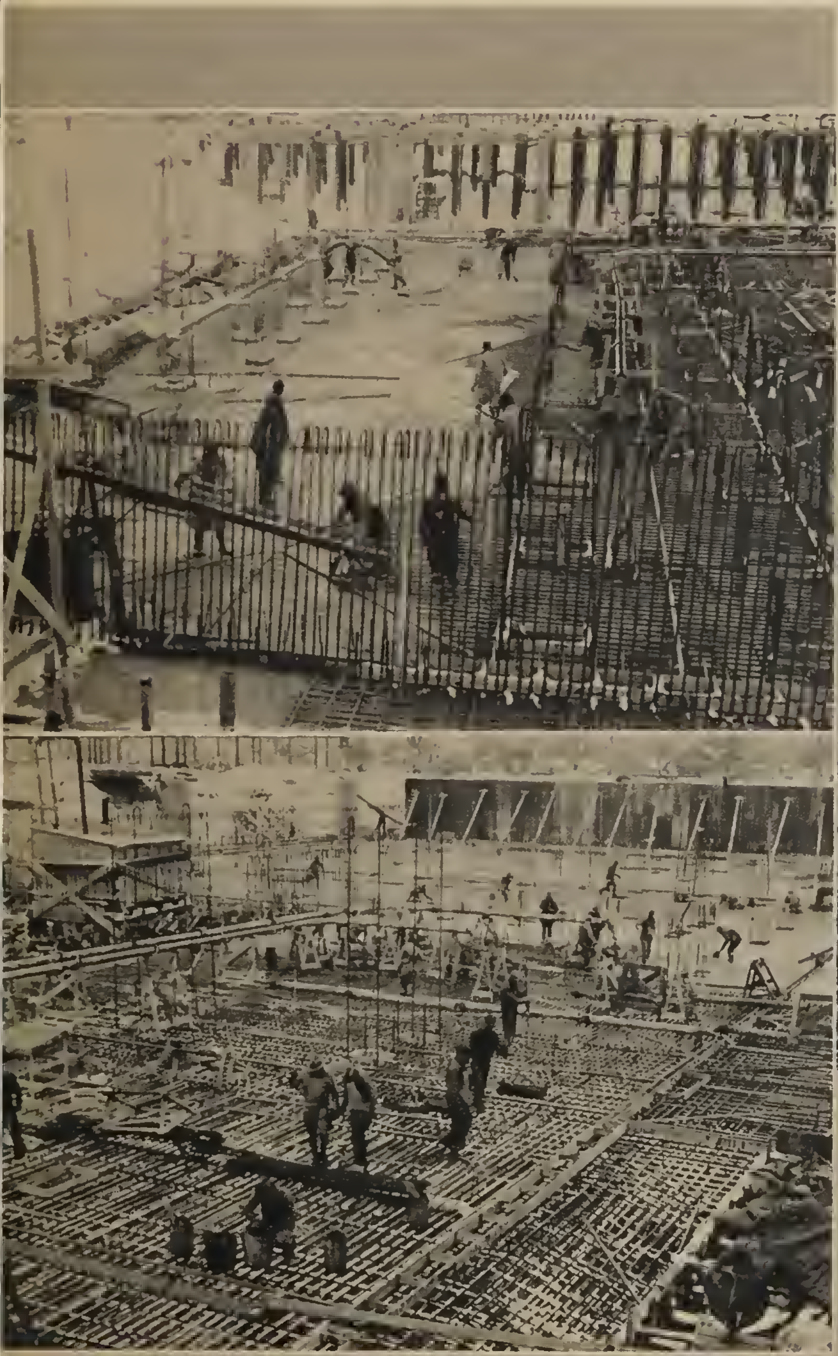
What the REX PUMPCRETE *is doing*

SECTION 3

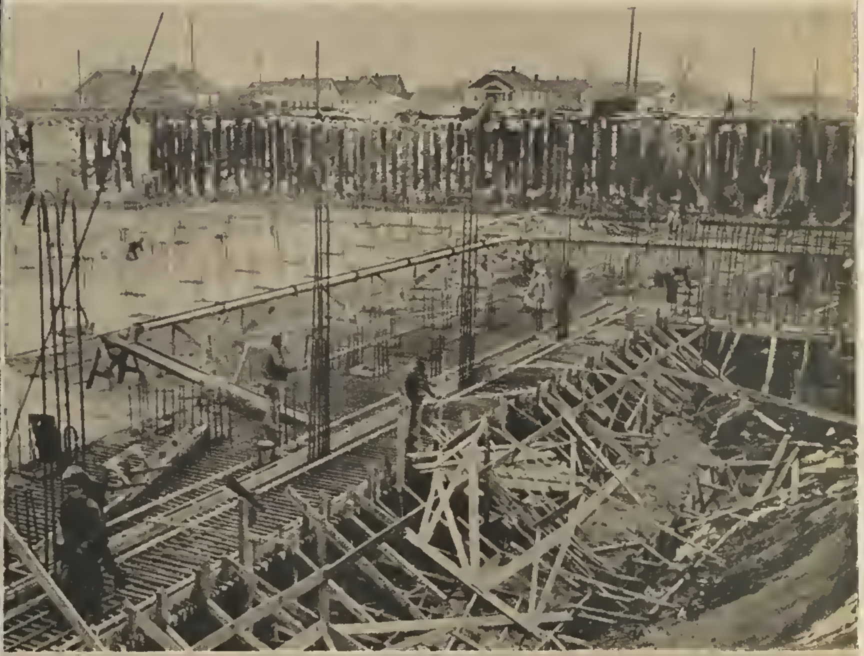
HERE'S WHAT ONE CONTRACTOR DID WITH REX PUMPCRETE

For General Motors Corporation:
  General Motors Stamping Plant Grand Rapids, Michigan.
  General Motors Assembly Plant Los Angeles, California.
  General Motors Assembly Plant Linden, New Jersey.
For the Chrysler Corporation:
  Chrysler Warehouse Marysville, Michigan.
  Chrysler Press Shop Detroit, Michigan.
For the Jones and Laughlin Steel Company:
  Hot Strip Mill Pittsburgh, Pa.
For the World Champion Detroit Tigers:
  Navin Field Addition.

Jerome A. Utley,
Contractor and Engineer



Typical J. A. Utley Pipe line setups



One Rex double PUMPCRETE and two Rex single PUMPCRETES are proving to be invaluable to this nationally known contractor. Used on the construction of all sizes of industrial plants, this method has proved to be the most economical. The achievement of placing over 100,000 cubic yards of concrete of various mixtures and different aggregates, on many sizes and types of jobs, cannot be overlooked as a real record for the PUMPCRETE.

What the REX PUMPCRETE *is doing*

SECTION 3

IMPERIAL DAM

YUMA, ARIZ. **1936** MORRISON, UTAH WINSTON, CONTRACTOR

This important section of the All-American Canal project is using two Rex PUMPCRETE installations as the concrete placing equipment. The two setups are encountering every type of construction, from buildings to tunnels.

The central mixing plant for the double PUMPCRETE is located at the California end of the job.

Typical PUMPCRETE and mixing setup for concrete placement on Imperial Dam.

What the REX PUMPCRETE *is doing*

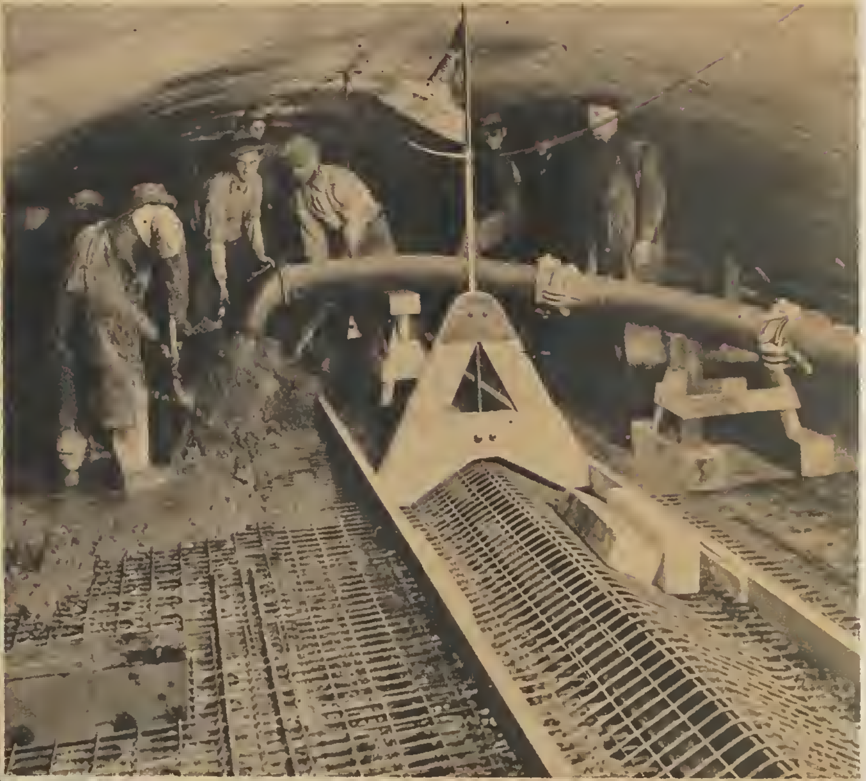
SECTION 3

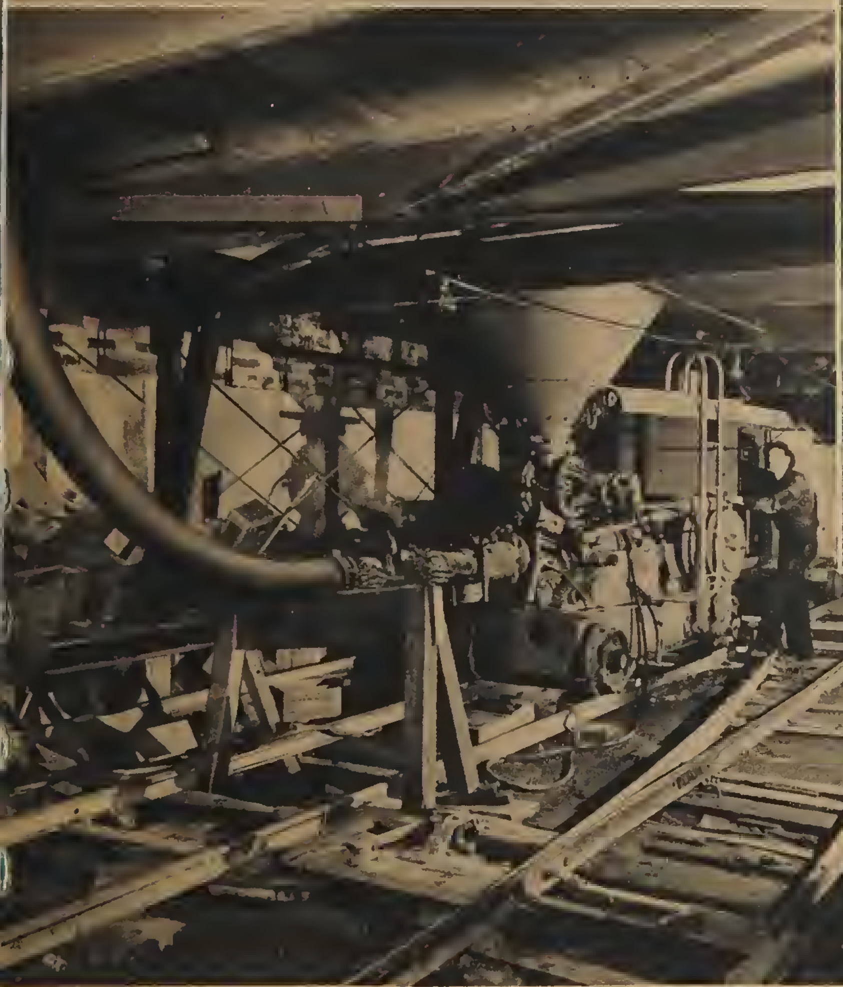
MIDTOWN TUNNEL

NEW YORK, N. Y. **1936** MASON & HANGER CO., CONTRACTORS

3700 yards were placed in this tunnel project by a Rex Single PUMPCRETE. The PUMPCRETE was mounted for operation on a 36-inch gauge track and when placing the slab of the air duct it was necessary to use a 180° bend in the pipe.

The pipe line affords quick distribution and does not interfere with the workmen when placing concrete in the roof slab.





This mobile unit is pumping directly into a 180° bend in order to place the air-duct slab.

What the REX PUMPCRETE *is doing*

SECTION 3

OFFICE BUILDING FOR JOHNSON'S WAX

S. C. JOHNSON & SONS, CONTRACTORS 1936 RACINE, WIS.

A Rex Single PUMPCRETE placed the 2500 yards in this job which is typical of the average city office building contract. From one setup it successfully reached all of the footings, columns, beams and slabs. PUMPCRETE'S flexibility made it the ideal setup for a job of this type.

These widely distributed footings were placed with a minimum of pipe handling.

The pipe line placing side walls.

The PUMPCRETE, stationed close to the job, uses only a small working space.

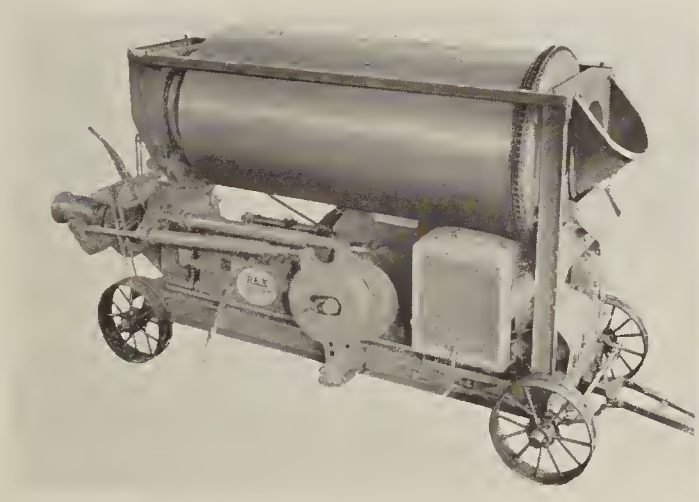
CONCRETE MIXES AND THEIR EFFECT ON PUMPABILITY

Nearly all of the mixtures commonly used are pumpable, provided they are of a readily workable consistency. The matter of concrete mixtures is much too complex to permit generalizing, but provided there is enough good sand and the slump can be maintained at 2 inches, or more, the results will be consistently satisfactory. In some cases "enough" sand may be more than the concrete technician approves of, and with less than 4¾ bags of cement per yard some careful working out is sometimes required to combine strength and workability. While concrete as dry as ½" slump has been pumped successfully it is probable that the most dependable slump is about 3", but the maximum distance and height is obtained with good concrete of 4- or 6-inch slump.

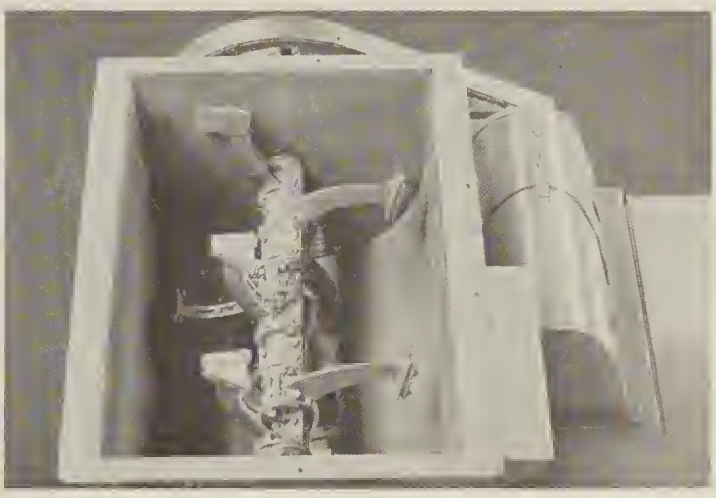
Handling of the more difficult mixtures is facilitated by the use of a remixer on the PUMPCRETE. A pugmill hopper (or rotary drum remixer) used in place of the standard cone hopper corrects any segregation due to charging and keeps the concrete properly mixed till it is sucked into the pump cylinder—even if long delays are encountered.

A Rotary Drum type remixer has been successfully used on special tunnel PUMPCRETE machines. These special machines have the concrete mixer and the PUMPCRETE incorporated in one self propelled unit.

The Rex PUMPCRETE has successfully pumped many thousands of yards of cinder and slag concrete.



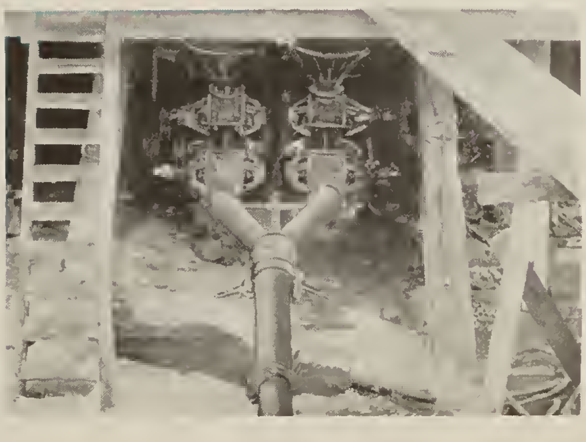
The Rex single unit Rotary Drum Remixer and PUMPCRETE.



The Rex Pugmill Hopper prevents segregation.

PIPE LINE HANDLING

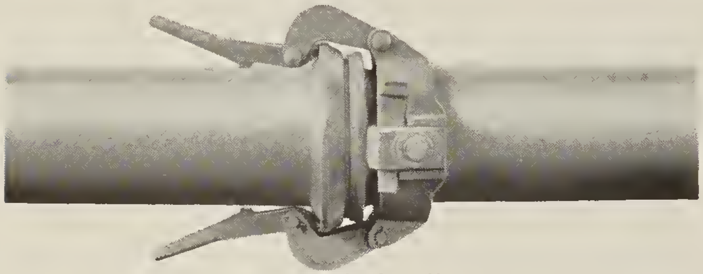
The setting up of the pipe line from the PUMPCRETE to the forms and the distribution of the concrete from the end of the pipe line are most important parts of the PUMPCRETE installation. The pipe line setup that requires the least number of shutdowns during the pumping of concrete is the most economical. The PUMPCRETE method is the only continuous method and therefore permits maximum capacity. All other concreting operations should be timed accordingly to obtain as nearly as possible uninterrupted pumping.



Rex Siamese Connection

TWO PIPES MADE ONE WITH SIAMESE "Y" CONNECTION

Perfecting a practical Siamese "Y" connection to combine the two streams of a double pump was the result of much study and experimentation. The present construction involves an enlargement at the junction of the two incoming pipes so that the area at the point where the streams are completely merged is one and one-half to two times the area of either of the incoming pipes. To reduce this to normal pipe size involves the use of one or more taper sections connected in series.



Rex Toggle Coupling

The pipe line itself is of unusual construction with special toggle couplings that can be connected in half a minute and disconnected in 10 seconds.

The standard length of a pipe section is 10 ft. In addition, 5 ft., 3 ft., 2 ft. and 1 ft. sections are furnished, also 90, 45, 22½ and 11¼ degree bends. With this assortment, almost any desired point can be reached. 6-in., 7-in. and 8-in. pipes are used. The nominal size is the outside diameter, and the wall thickness is approximately 3/16 in. or less.

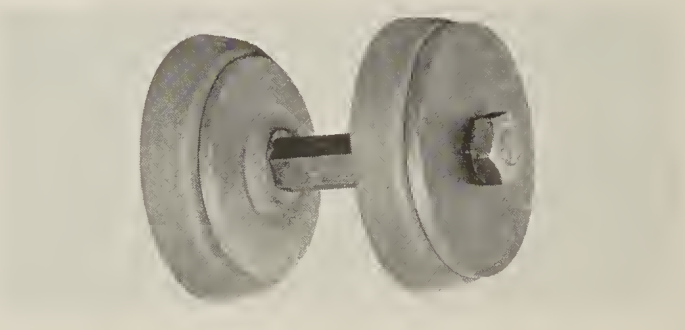
The wear in the pipe line is surprisingly small. Most of the pipe, including the bends, will be good for more than 50,000 cu. yds.

Arterial pipe lines on Outer Drive Improvement Project—Chicago.

It is frequently advisable to have sufficient pipe for a number of "artery" lines in different directions laid down at all times. On some of the Mississippi River lock and dam jobs, approximately half a mile of pipe was available, although the maximum pumping distance rarely if ever exceeded 800 ft.

THE REX PIPE LINE IS EASILY CLEANED

The Rex Engineers have perfected a practical, speedy and easy method to clean the pipe line at the end of a pour. This method employs the use of a "go-devil" which is propelled through the line by water or compressed air. The go-devil is a dumbbell-shaped piece with a cup rubber on each end. These rubbers are a close fit in the pipe line and with the cups turned toward the pressure, the seal is the same as in a simple plunger pump.



The Rex Go-Devil.

PIPE LINE SETUP ON A SLAB

When placing concrete in a slab, it is always best to extend the pipe line to the remotest part of the slab and work toward the PUMPCRETE. The pipe line is usually placed at the center of the slab. The pipe line should be set on horses — the height of the horses will be determined by the width of the slab. One horse should be placed under each ten-foot section of pipe. The best location for the horse is a little past center, toward the toggle end, so the filled pipe section will tip toward the placed concrete when removing it. This will make for easy handling of the pipe sections. It is impossible to connect a section of pipe line while the PUMPCRETE is pumping.

Pouring Tank Slab — Sewage Disposal Plant—Indianapolis.

PIPE LINE SETUP FOR FOOTINGS, PEDESTALS, PIERS, OR COLUMNS

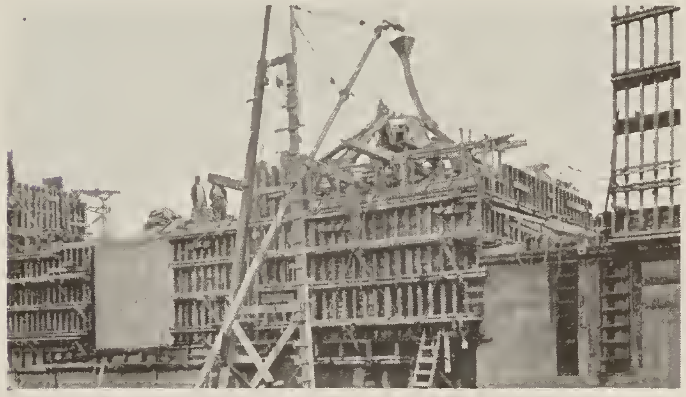
The method of placing the concrete in forms of this type is usually the reverse of pumping concrete in slabs. The concreting is started in the forms nearest the PUMPCRETE and pipe line added to the existing pipe line to reach the next form.

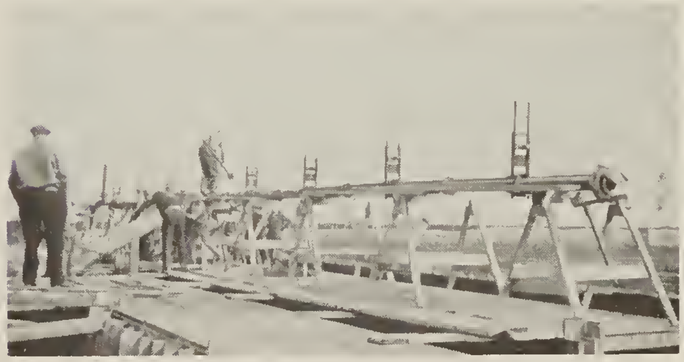
PIPE LINE SETUP FOR THIN WALLS

To place concrete in long, thin walls in which the concrete has to be placed in layers from one to two feet in thickness, the Rex engineers have developed the gate section. These gate sections are placed in the pipe line at intervals of about twenty feet. The placing of layers of concrete in a thin wall with the gate sections is easily accomplished. The gate nearest the PUMPCRETE is opened and the concrete is pumped into the form until the required amount is deposited. The first gate is then closed, the pumping being stopped momentarily following which the next gate farther away from the PUMPCRETE is opened. The number of gate sections in a setup will depend upon the length of the wall.

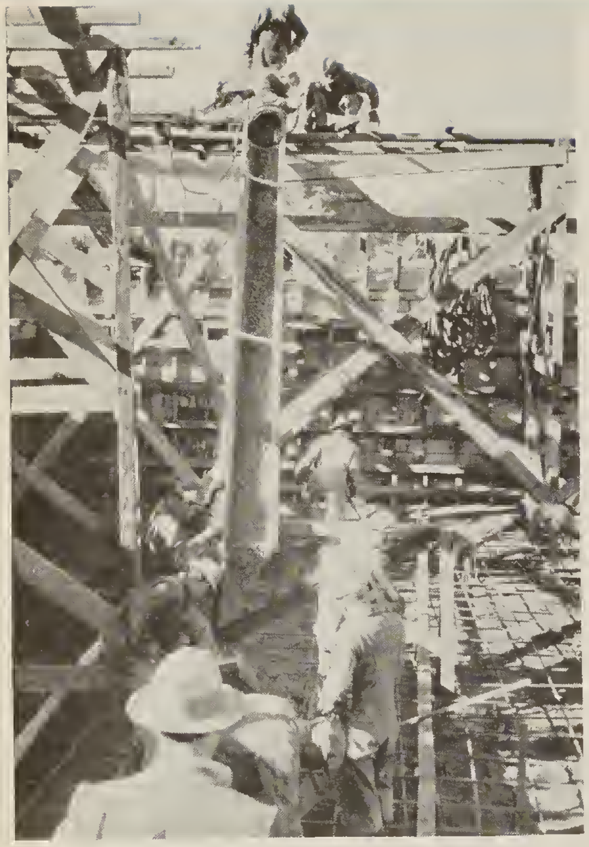
PIPE LINE SETUP FOR MASS CONCRETE PUMPING

The setting up of the pipe line for placement in large forms is generally accomplished by suspending the pipe line over the center of the form by the means of an A-frame. The pipe is so located that the concrete is deposited into a hopper connected to a chute which can be readily shifted over the area of the form.


Mass concrete being pumped on Mississippi Lock No. 12.


Use of gate sections to pump concrete into wall form.

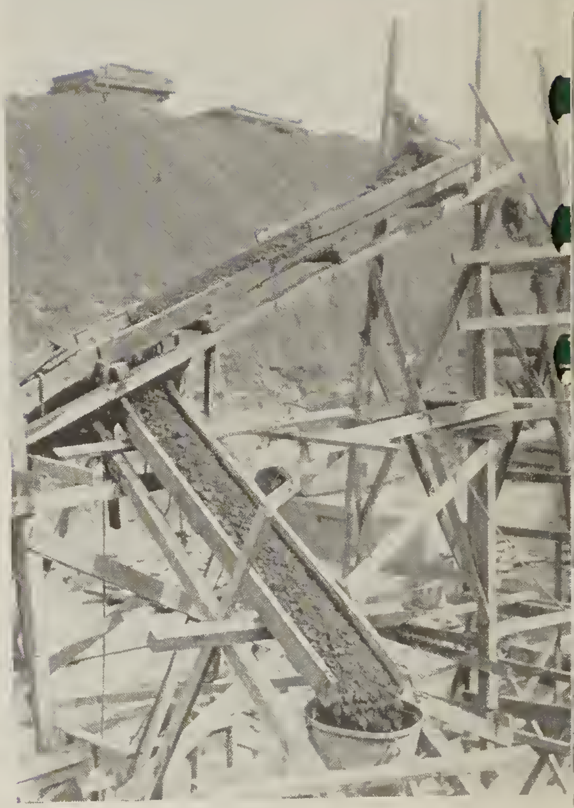
FINAL DISTRIBUTION AT



Steel chute used in pouring the piers of Bonneville Dam.

WOOD OR STEEL CHUTE

Many times it is practical to pump to the approximate center of the form and distribute concrete over the entire area with wood or steel chutes.

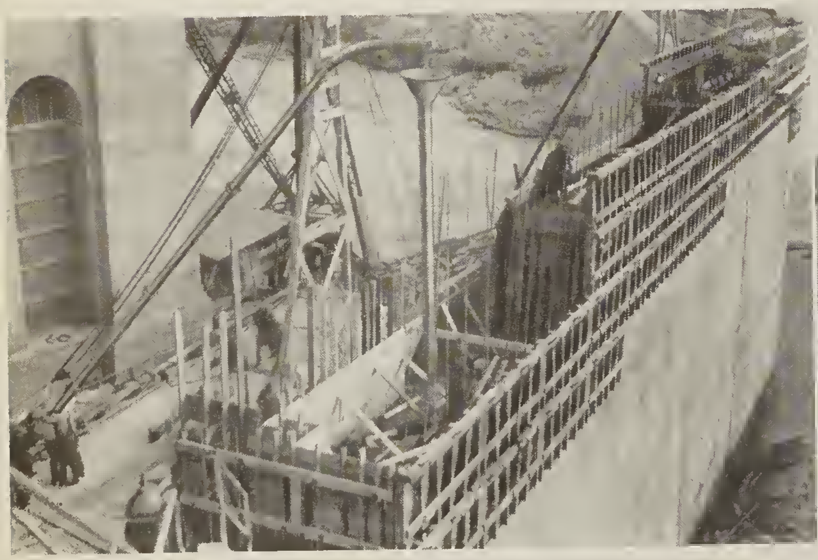


Traveling down the main-line chute, the concrete is bypassed through another wooden chute for final placement.

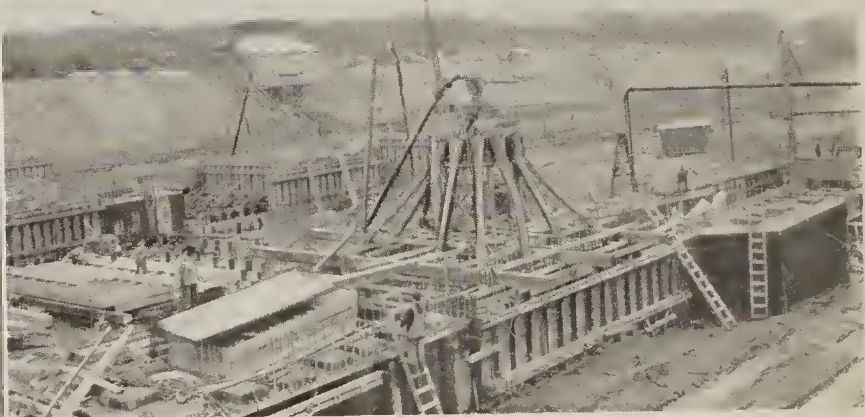
This typical setup was used on the Londonville Dam in Ohio.

"ELEPHANT TRUNK" OR ARTICULATED PIPE SPOUTS

This spout, due to its extreme flexibility, is an efficient aid in placing concrete and it is particularly useful when dropping concrete through reinforcing steel, especially in high walls.



Pouring a section in the diversion wall of the hydro-electric plant at Holtwood, Pa. The end of the single trunk spout can be swung to any point in the forms.



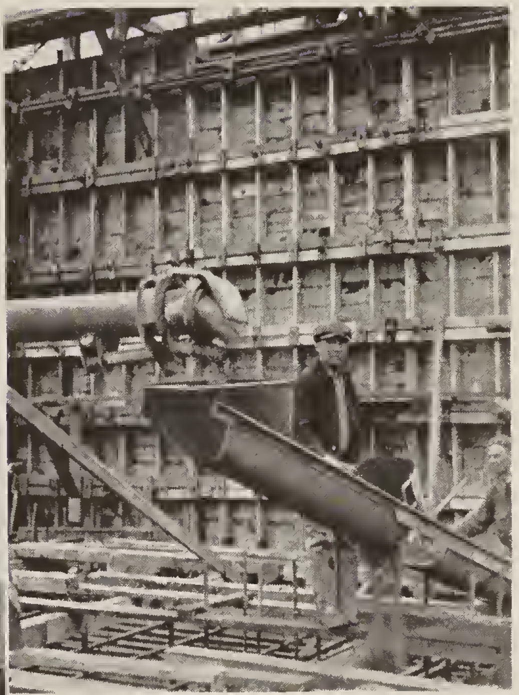
Mississippi River Lock 13. This setup of multiple trunk spouts around a single pipe enables the large forms to be filled evenly and in record time.

END OF PIPELINE

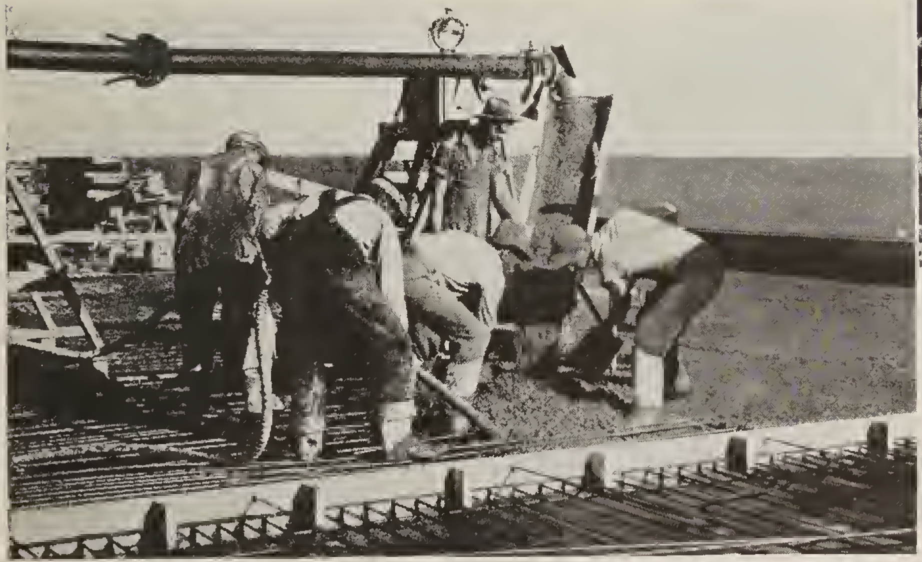
SECTION FIVE

SWIVEL CHUTES

This widely used attachment hooks on the end of the pipe line and can be moved through a pouring radius of 10 to 20 feet. Light and simple in construction, it is easily removed as the sections of the pipe are being unhooked.



Having poured the wall, this chute is now placing concrete in the slab through its simple intermediate gate.
(Carnegie-Illinois Mill Foundation and slab)



This slab in the Milwaukee Filtration plant is pouring easily with the aid of the swivel chute.

DIRECT FROM PIPE TO FORM

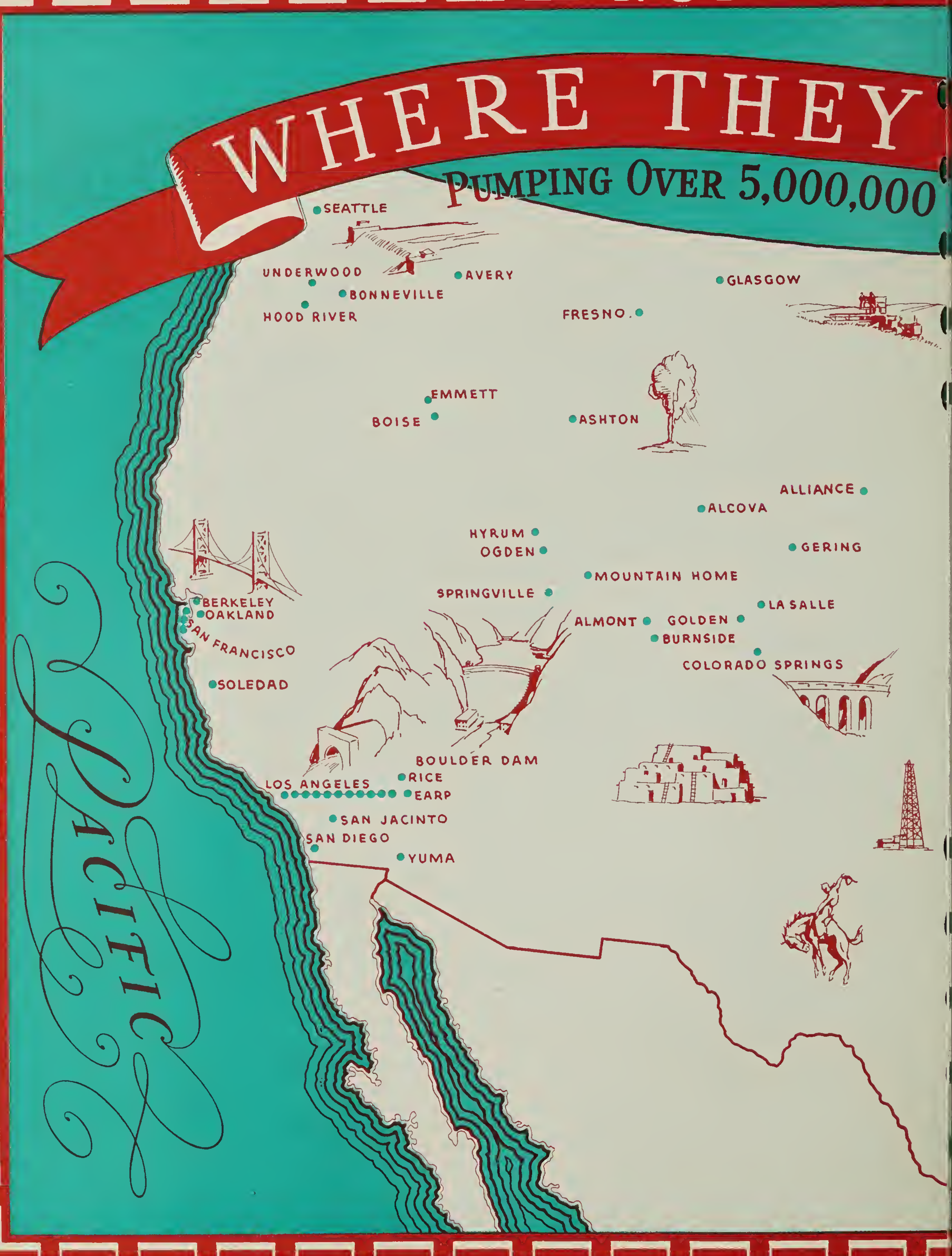
Oftentimes the concrete can reach its final position without any aid at the end of the pipe line. This is most often true in the placement of pedestals, columns and tunnel linings.

Pouring a pedestal in the Huey Long Bridge with the second pipe line in place for a quick change.

Pipe line ready to pour section in the Seboomook Dam, on the Penobscot River.

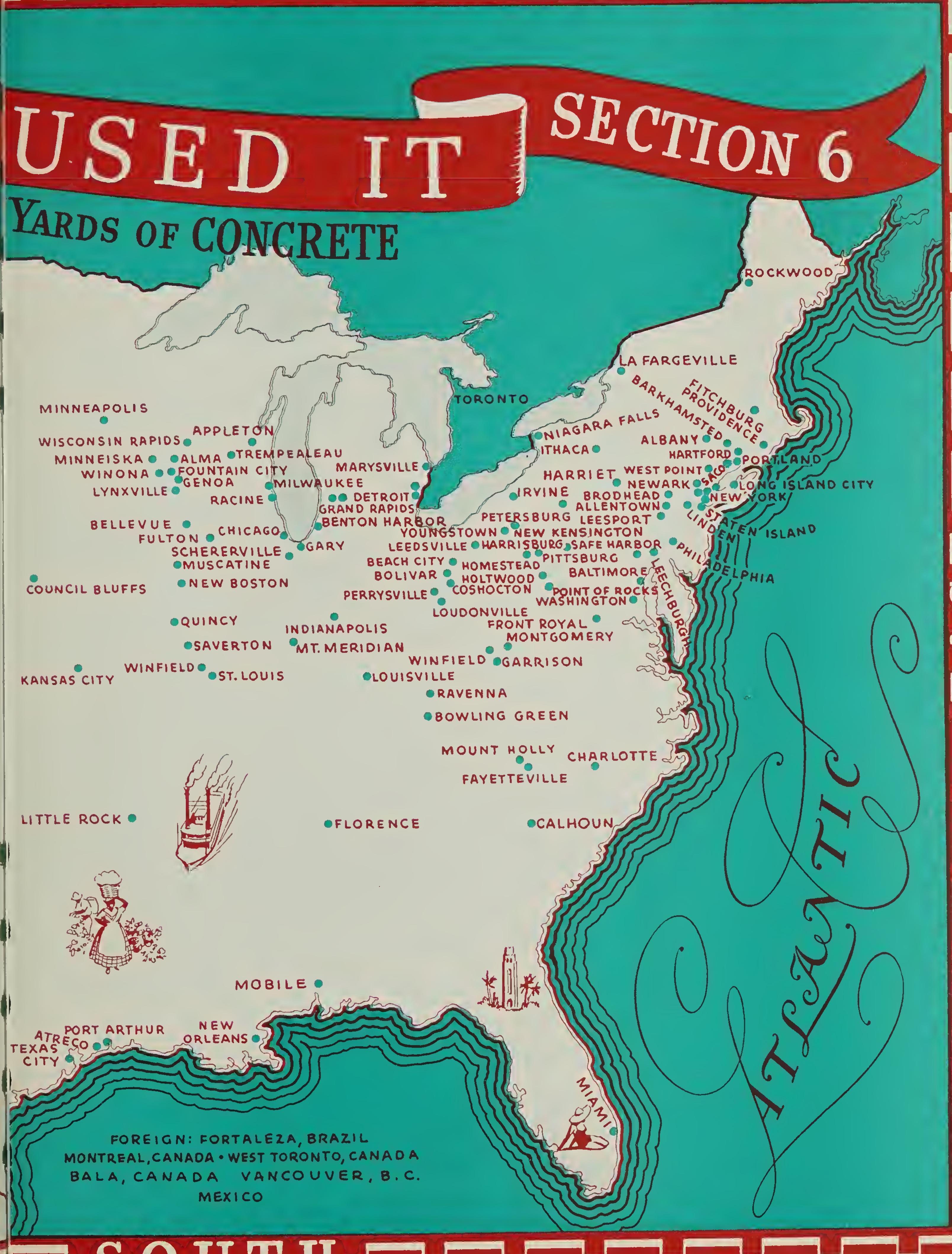
WHERE THEY

PUMPING OVER 5,000,000



USED IT SECTION 6

YARDS OF CONCRETE



FOREIGN: FORTALEZA, BRAZIL
MONTREAL, CANADA • WEST TORONTO, CANADA
BALA, CANADA VANCOUVER, B.C.
MEXICO

LIST OF USERS

1932-1938

The Rex PUMPCRETE goes into action for the first time in America on August 11, 1932.

PUMPCRETE'S background of over 5,000,000 cubic yards successfully placed since 1932 is impressive in itself. This background, coupled with the list of PUMPCRETE users, is complete and undeniable proof of PUMPCRETE'S nation-wide acceptance. This list includes the largest construction companies in the United States and many of the smaller ones with relative variations in yardages placed—facts that clearly show that the PUMPCRETE is the all-around placement method.

IN 1932 PUMPCRETE WAS FIRST USED BY:

W. M. Christensen Construction Co.
Milwaukee, Wis.
Approx. 180 cu. yds. pumped*

Corbetta Concrete Corp.
New York, N. Y.
Approx. 1,500 cu. yds. pumped*

Six Companies, Inc.
Boulder City, Nev.
Approx. 1,850 cu. yds. pumped*

*Additional yardage pumped in the following year.

PUMPCRETE

SECTION 7

LIST OF USERS

1933—In this year a quarter of a million yards were pumped by:

User	Location of Project	Yardage
*1. Arundel Corp.	Baltimore, Md.	8,250
*2. W. M. Christensen Constr. Co.	Milwaukee, Wis.	5,870
*3. C. & R. Constr. Co.	Barkhamsted, Conn.	7,275
*4. Eureka Fireproofing Co.	Albany, N. Y.	5,200
*5. G. R. Fehr Co. & Kramp Constr. Co.	Milwaukee, Wis.	22,100
*6. Frazier-Davis Co.	Bowling Green, Ky.	31,060
*7. Edward E. Gillen Co.	Minneiska, Minn.	57,500
*8. Hector Estrup & Co.	Ithaca, N. Y.	5,000
*9. MacDonald Engr. Co.	New Orleans, La.	9,000
*10. Merritt Chapman & Whitney	Fountain City, Wis.	5,900
*11. Ouilmette Constr. and Engr. Co.	Alma, Wis.	56,000
*12. Six Companies, Inc.	Boulder City, Nev.	5,000
*13. J. Rich Steers	Newark, N. J.	3,995
*14. Transbay Constr. Co.	San Francisco, Calif.	35,000

Nearly a million yards were pumped in 1934 by:

User	Location of Project	Yardage
1. Arundel Corp.	Baltimore, Md.	4,885
2. Arundel Corp.	Long Island, N. Y.	14,650
*3. Geo. J. Atwell Foundation Corp.	New York, N.Y.	4,000
*4. Boso & Ritchie	Montgomery, W. Va.	18,775
5. C. & R. Constr. Co.	Barkhamsted, Conn.	18,000
*6. Corbetta Concrete Co.	New York, N.Y.	9,000
*7. Central Ready Mix Concrete Co.	Milwaukee, Wis.	6,300
8. Wm. Eisenberg & Sons	Philadelphia, Pa.	10,000
*9. Wm. Eisenberg & Sons	Fayetteville, N. C.	13,000
10. Eureka Fireproofing Co.	Staten Island, N. Y.	15,000
*11. G. R. Fehr & Kramp Constr. Co.	Milwaukee, Wis.	23,095
12. Frazier-Davis Co.	Bowling Green, Ky.	16,640
13. Industrial Equipment Company	New York, N. Y.	15,000
14. Jutton & Kelly	Genoa, Wis.	64,345
15. Lawler-Woodward Co.	Alcova, Wyo.	12,000
*16. M. A. Long	Allentown, Pa.	20,000 slag
17. McDonald Engr. Co.	New Orleans, La.	8,340
18. W. W. Magee Co.	Lynxville, Wis.	80,000
19. McCarthy Improvement Co.	Winona, Minn.	35,600
*20. Jos. Meltzer, Inc.	Saverton, Mo.	65,410
*21. Jos. Meltzer, Inc.	Quincy, Ill.	49,718
22. Merritt Chapman & Whitney Corporation	Fountain City, Wis.	34,300
23. Orino, Bell, Malcomb	Bonneville, Ore.	7,000
24. Orino, Birkemeir & Saremal	Bonneville, Ore.	7,000

* Additional yardage pumped the following year.

User	Location of Project	Yardage
*25. Poirier & McLane	New York, N.Y.	8,700
26. The Rust Engr. Co.	Youngstown, O.	30,000 slag
27. Safe Harbor Pr. Co.	Safe Harbor, Pa.	5,500
*28. Six Companies, Inc.	Boulder City, Nev.	119,200
29. Spencer, White & Prentis	Trempealeau, Wis.	56,925
*30. James Stewart Corp.	Bellevue, Ia.	50,500
*31. J. A. Terteling & Sons	Hyram, Utah	6,000
*32. Transbay Constr.	San Francisco, Calif.	40,000
*33. Whiting & Turner	Leesport, Pa.	6,000

One and one-quarter million yards were pumped in 1935 by:

User	Location of Project	Yardage
*1. Geo. J. Atwell Foundation Corp.	New York, N.Y.	4,000
*2. Birkemeir & Saremal	Bonneville, Ore.	12,000
*3. Barrett & Hilp Contr. Co.	San Francisco, Calif.	400
*4. Boso & Ritchie	London, W.Va.	18,000
*5. Consolidated Engr. Co.	Baltimore, Md.	13,000
*6. M. E. Carlson	Burnside, Colo.	3,500
*7. Central Engr. Co.	Muscatine, Ia.	26,000
*8. Central Ready Mix Concrete Co.	Milwaukee, Wis.	8,000
*9. Columbia Constr. Co.	Bonneville, Ore.	2,200
*10. T. E. Connolly, Inc.	San Francisco, Calif.	16,000
11. Corbetta Constr. Co.	Catskill Mountain Bridge	4,200
12. Corbetta Constr. Co.	New York Central Yards	10,000
13. Corbetta Constr. Co.	Tri-Borough Bridge	3,000
*14. Duke Power Co.	Charlotte, N. C.	400
*15. Wm. Eisenberg & Sons	Fayetteville, N. C.	8,000
*16. General Constr. Co. & J. F. Shea Co., Inc.	Bonneville, Ore.	100,000
*17. M. H. Golden	San Diego, Calif.	8,000
*18. Wm. Kennedy Constr. Co.	Long Island City, N. Y.	4,700
19. Kramp Constr. Co.	Milwaukee, Wis.	35,500
20. Jos. Lombardi	Louisville, Ky.	7,000
21. M. A. Long	Brodhead, Pa.	8,000 slag
22. Mason & Walsh	Glasgow, Mont.	29,000
23. H. E. McKeen & Co.	Toronto, Can.	2,000
24. Jos. Meltzer, Inc.	Saverton, Mo.	22,700
25. Jos. Meltzer, Inc.	Quincy, Ill.	38,475
*26. Metropolitan Water District of Southern California	Colorado River Aqueduct	250,000
*27. City of Minneapolis, Dept. of Sewers	Minneapolis, Minn.	4,000
*28. Morris & Dougherty	Avery, Idaho	800
29. Patti Constr. Co.	Kansas City, Mo.	4,000
*30. Poirier & McLane	New York, N. Y.	32,000
*31. Powers Thompson	Gary, Ind.	65,000
*32. Six Companies, Inc.	Boulder City, Nev.	124,000

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* Additional yardage pumped in the following year.

SECTION 7

PUMPCRETE LIST OF USERS

	User	Location of Project	Yardage
*33.	Six Companies of California	Oakland, Calif.	17,000
34.	James Stewart Corp.	Bellevue, Ia.	31,100
35.	G. L. Tarlton Co.	St. Louis, Mo.	33,000
36.	Tennessee Valley Authority	Florence, Ala.	26,460
37.	J. A. Terteling & Sons	Boise, Idaho	6,000
38.	Utah Constr. Co.	Alcova, Wyo.	6,000
39.	Utah Constr. Co.	Ogden, Utah	6,000
40.	Walsh Constr. Co.	Earp, Calif.	50,000
41.	Chas. R. Wermuth & Sons	Indianapolis, Ind.	8,000

AND IN 1936—The PUMPCRETE went everywhere and did everything in the hands of:

	User	Location of Project	Yardage
1.	Allied Bridge & Constr. Co.	Chicago, Ill.	2,500
2.	Geo. J. Atwell Foundation Corp.	New York, N.Y.	4,000
3.	Barrett & Hilp	San Francisco, Calif.	3,600
4.	Bates & Rogers	San Francisco, Calif.	1,800
5.	Bentley Constr. Co.	Milwaukee, Wis.	4,000
*6.	Henry Biekel Co.	Louisville, Ky.	12,000
*7.	Boso & Ritchie	Winfield, W.Va.	4,800
*8.	Geo. M. Brewster & Sons	Coshocton, O.	51,500
*9.	F. A. Canuso & Sons	Niagara Falls, N.Y.	12,000
10.	M. E. Carlson	Colorado Springs Bridge	4,500
11.	M. E. Carlson	LaSalle, Colo.	3,550
12.	Corbetta Constr. Co.	Tri-Borough Bridge, N.Y.	12,000
13.	Corbetta Constr. Co.	Henry Hudson Mem. Bridge, N.Y.	2,000
14.	John F. Casey Co.	New Kensington, Pa.	15,000
15.	Central Ready Mix Concrete Co.	Milwaukee, Wis.	12,000
16.	Central Engr. Co.	Muscatine, Ia.	34,000
17.	Colonial Constr., Inc.	Underwood, Wash.	2,000
18.	T. E. Connolly, Inc.	Mountain Home, Utah	5,000
*19.	Columbia Constr. Co.	Bonneville, Ore.	19,400
20.	Consolidated Eng. Co.	Philadelphia, Pa.	15,000
21.	Cons. Water Power & Paper Co.	Wisconsin Rapids, Wis.	5,700
22.	Culbertson Const. Co.	Leedsville, O.	9,000
23.	Cornell Cont. Corp.	New York City	2,600
*24.	H. J. Deutschbien & Co.	Rockwood, Me.	25,500
25.	Duke Power Co.	Mt. Holly, N. C.	5,000
26.	Wm. Eisenberg & Sons	Beach City, O.	31,000
*27.	Frazier-Davis Co.	Yuma, Ariz.	20,000
28.	Gen. Constr. Co. & J. A. Shea Co.	Bonneville, Ore.	10,000
29.	Gross & Stevens Co.	Gering, Neb.	440
30.	S. A. Healey Co.	Chicago, Ill.	6,000
*31.	S. C. Johnson & Sons, Inc.		
32.	Jacobus & Winding	Racine, Wis. Milwaukee, Wis.	500 300
33.	Joplin & Eldon	Hood River, Ore.	3,000
34.	M. W. Kellog Co.	Port Arthur, Tex.	8,000
35.	M. W. Kellog Co.	Texas City, Tex.	10,000
36.	Wm. Kennedy Constr. Co.	Long Island City, N.Y.	3,650

PUMPCRETE

SECTION 7

LIST OF USERS

User	Location of Project	Yardage
37. Max J. Kuney Co.	Ashton, Idaho	6,285
38. Klug & Smith	Milwaukee, Wis.	450
*39. W. E. Lennane	Detroit, Mich.	5,100
40. M. A. Long	Allentown, Pa.	7,000
*41. Louisville & Nashville R. R.	Ravenna, Ky.	1,500
42. Mason & Hanger	New York City, N. Y.	3,700
43. Mason & Walsh	Glasgow, Mont.	49,000
44. Massman Constr. Co.	New Boston, Ill.	15,310
45. McCarthy Improvement Co.	Fulton, Ill.	82,000
46. F. H. McGraw Co.	Hartford, Conn.	10,000
47. McKay Eng. Constr. Co.	Chicago, Ill.	9,000
48. Arthur G. McKee Co.	Homestead, Pa.	18,000
49. H. E. McKeen & Co.	Toronto, Can.	4,000
50. John McShain Co.	Washington, D. C.	5,500
*51. Merritt Chapman & Scott	Portland, Conn.	15,000
*52. Metropolitan Water District of Southern Calif.	Colorado River Aqueduct	324,600
*53. Metropolitan Water District of Southern Calif.	San Jacinto, Calif.	20,000
*54. Minder Constr. Co.	Bolivar, Ohio	27,000
*55. City of Minn., Dept. of Sewers	Minneapolis, Minn.	36,000
56. Morris & Dougherty	Minneapolis, Minn.	850
*57. Morrison-Utah Winston	Yuma, Ariz.	20,000
*58. Newhall Herkner Co.	Perrysville, O.	12,000
*59. W. E. O'Neill Constr. Co.	Chicago, Ill.	21,500
60. Pennsylvania Water & Power Co.	Holtwood, Pa.	24,400
61. Poirier & McLane	New York City	51,400
*62. Powers Thompson	Gary, Ind.	10,800
*63. Potts & Callahan Co.	Baltimore, Md.	2,500
64. Six Companies, Inc., & U. S. Bureau of Reclamation	Boulder City, Nev.	39,000
65. Six Companies of California	Berkeley, Calif.	33,100
*66. J. A. Terteling & Sons	Emmett, Idaho	13,000
67. Union Constr. Co.	Council Bluffs, Iowa	17,500
68. United Engrs. & Constr. Co.	Winfield, Mo.	4,400
*69. United Engrs. & Constr. Co.	Golden, Colo.	2,000
*70. Utah Constr. Co.	Ogden, Utah	500
71. J. A. Utley & Merritt Chapman & Scott	Pittsburgh, Pa.	37,700
72. J. A. Utley	Grand Rapids, Mich.	24,000
73. J. A. Utley	Detroit, Mich.	2,500
74. J. A. Utley	Marysville, Mich.	7,700
75. J. A. Utley	Detroit, Mich.	10,300
*76. J. A. Utley	Linden, N. J.	26,000
77. J. A. Utley	Los Angeles, Calif.	30,000
78. G. A. & F. M. Wagman	Petersburg, Pa.	3,000
*79. Walsh Constr. Co.	Earp, Calif.	125,027
80. Charles R. Wermuth & Sons	Indianapolis, Ind.	4,000
81. Charles R. Wermuth & Sons	Indianapolis, Ind.	2,000
82. C. T. Wills, Inc.	Providence, R. I.	16,400
83. C. T. Wills, Inc.	West Point, N. Y.	14,850
84. Winston Bros. Co.	Loudonville, O.	15,000
*85. Winston Bros. Co.	Rice, Calif.	140,699

*Additional yardage to be placed in following year.

PUMPCRETE

SECTION 7

LIST OF USERS

By 1937 Rex Pumpcretes were used so extensively that it was impossible to keep a record of the hundreds of jobs where they were put to work. The following is a list of *new* users of Rex 180 and 200 Pumpcretes in 1937.

User	Location of Project
S. J. Groves & Sons Co.	Miami, Fla.
S. A. Healy Co.	Detroit, Mich.
Guthrie-Marsch-Peterson	Irvine, Pa.
Fredk. Snare Corp.	New York, N. Y.
Hydro Elec. Power Comm. of Ontario	Bala, Canada
Aluminum Ore Co.	Mobile, Ala.
Geo. T. McLean	Front Royal, Va.
Mora & Gonzalez	Mexico
N. Y. C. Railroad	New York, N. Y.
C. W. Brockley & Co., Ltd.	Vancouver, B. C.

User	Location of Project
Geo. F. Hazelwood Co.	Point of Rocks, Md.
Dominion Constr. Co.	La Fargeville, N. Y.
Mora & Gonzalez	Mexico
Freeland, Inc.	Leechburgh, Pa.
Resettlement Admins.	Calhoun, S. C.
Barnes Constr. Co.	Grand Rapids, Mich.
Wachter O'Neil McGarry Bros.	Fresno, Mont.
Bryant & Detwiler Co.	Harriet, N. Y.
Sanders Eng. Co.	Saco, Me.

REX 160 PUMPCRETE USERS

User	Location of Project
R. McCalman, Inc.	Mt. Meridian, Ind.
Koepke Construction Co.	Appleton, Wis.
Salmon & Cowin, Inc.	Little Rock, Ark.
George W. Condon Co.	Alliance, Nebr.
J. C. O'Connor & Sons, Inc.	Schererville, Ind.
John G. Yerington	Benton Harbor, Mich.
Morrison Knudsen Co., Inc.	Almont, Colo.
A. H. Cox & Co., Inc.	Seattle, Wash.
Jerome C. Boespflug	Sheridan, Wyo.
Gray Construction Co.	Lakehurst, N. J.
Newstrom and Davis	Denver, Colo.
U. S. Engineers	San Francisco, Calif.

User	Location of Project
U. S. Engineers	Fitchburg, Mass.
Taylor Fichter Steel Constr. Co.	Atreco, Texas
Pennsylvania Supply Co.	Harrisburg, Pa.
U. S. Engineers Office	San Francisco, Calif.
Thomas Company	Garrison, Ky.
Rosoff Brader Company	New York, N. Y.
Brown Bevis Equip. Co.	Los Angeles, Calif.
Lord & Bishop	Soledad, Calif.
H. E. McKeen & Co., Ltd.	Montreal, Canada
Godsall & Co., Ltd.	West Toronto, Can.
Inspectoria Federal de Obras Contra as Seccas	Fortaleza, Brazil

HOW FAST AND HOW FAR *can concrete be pumped?*

SECTION 8

The following table of Pipe Line Data is based on converting the pumping resistance of any combination of straight pipe, bends and differences in elevation to the resistance of an equivalent length of straight horizontal pipe:

PIPE LINE DATA

Pipe Size	Equivalent Length of Straight Horizontal Pipe*	Vertical Distance**	Maximum Aggregate Square Screen Size
WITH REX PUMPCRETE No. 200 (7.9″) DOUBLE			
8″ O.D.	1000 ft.	100 ft.	3″
7″ O.D.	600 ft.	100 ft.	2½″
WITH REX PUMPCRETE No. 200 (7.9″) SINGLE			
8″	1000 ft.	100 ft.	3″
7″	800 ft.	100 ft.	2½″
WITH REX PUMPCRETE No. 180 (7.1″) DOUBLE			
8″	1200 ft.	120 ft.	2½″
7″	1000 ft.	120 ft.	2½″
6″	600 ft.	100 ft.	2″
WITH REX PUMPCRETE No. 180 (7.1″) SINGLE			
7″	1000 ft.	120 ft.	2½″
6″	800 ft.	100 ft.	2″
WITH REX PUMPCRETE No. 160 (6.3″)			
6″	800 ft.	100 ft.	2″
5″	500 ft.	100 ft.	1½″

*A 90 degree bend is figured as equivalent to 40 ft. of horizontal piping, a 45 degree bend equivalent to 20 ft., and 22½ degree bend equivalent to 10 ft.

**Not over 200 ft. of pipe actually.

A combination of horizontal and vertical distances is to be calculated on the basis of 1 ft. of vertical equalling 8 ft. of horizontal pumping. The total equivalent distance should *not* exceed the equivalent horizontal pumping distances shown in the tabulation.

EXAMPLE:

Assume the project is equipped with a single PUMPCRETE, Model No. 200, pumping through 8″ O.D. pipe line.

The total actual length of pipe line is 360 feet, which is made up of the following sections:

320 ft. straight pipe
2–90° bends
4–45° bends

There is a vertical lift at the end of the pipe line of 40 ft.

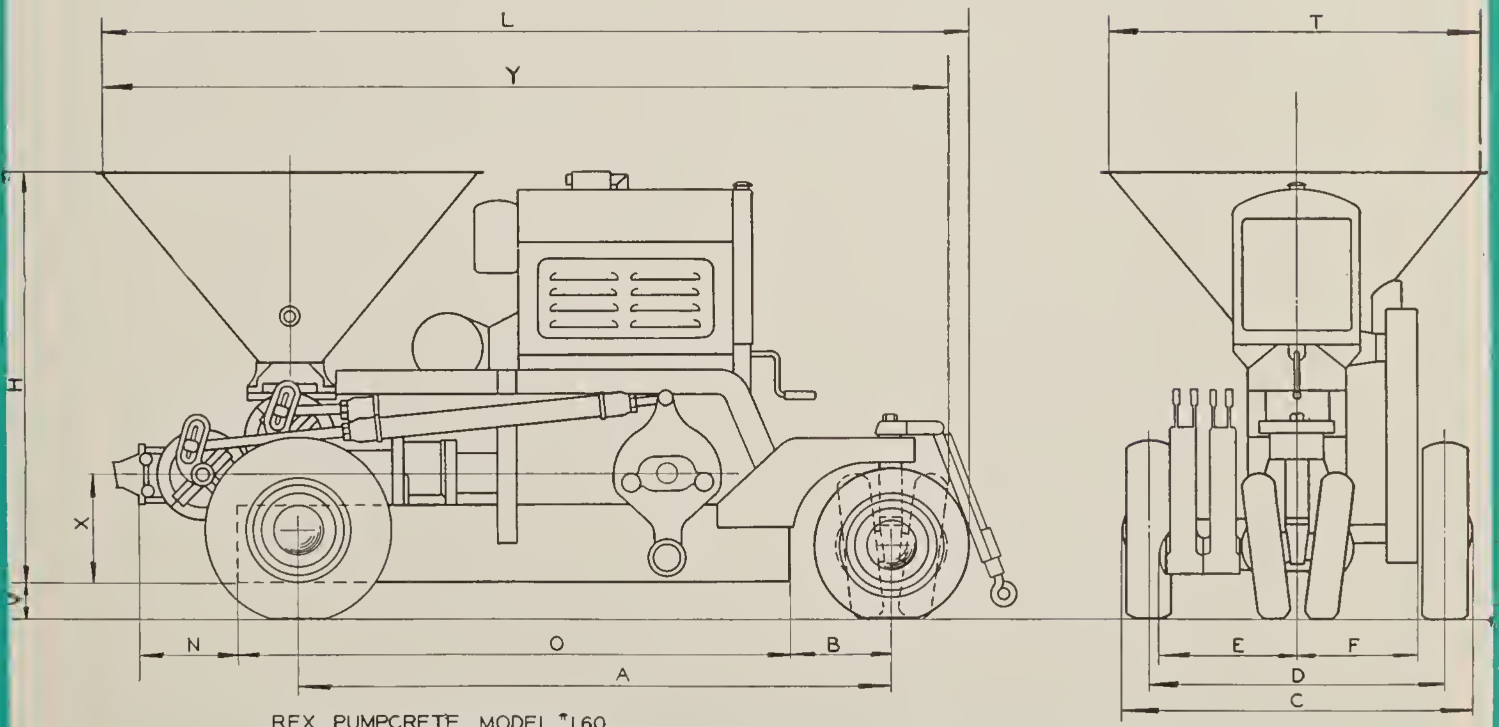
The equivalent length of straight horizontal pipe is determined as follows:

320 ft.	straight pipe— Equals	320 ft.
2–90°	bends (Equivalent to 40 ft. straight pipe)	80 ft.
4–45°	bends (Equivalent to 20 ft. straight pipe)	80 ft.
40 ft.	vertical lift (Equivalent 1 ft. vertical equals 8 ft. horizontal)	320 ft.
		800 ft.

SPECIFICATIONS *Section* 9

FOR MODEL No. 160 REX SINGLE PUMPCRETE

Capacity cubic yards per hour	15 to 20 cu. yds.
Bore of Cylinder	6.3″
Stroke of Piston	12″
R.P.M. (Approximate)	50
POWER	
4-Cylinder Gasoline Engine	25 h.p.
Electric Motor	20 h.p.
Hopper Capacity—Conical Hopper	¾ cu. yd.
Weight Equipped with Conical Hopper and Gasoline Engine—	5,600 lbs.



REX PUMPCRETE MODEL #160

A	B	C	D	E	F	H	L	N	O	T	V	X	Y
95½	16⅛	56½	48	22¼	20¾	66¼	139⅝	17	90	60	6	17¼	136¾

SPECIFICATIONS *Section* 9

FOR MODEL No. 180 REX SINGLE PUMPCRETE

Capacity cubic yards per hour, 20 to 27.
Bore of Cylinder, 7.1″.
Stroke of Piston, 12″.
R.P.M. (Approximate), 50.

POWER
4-Cylinder Gasoline Engine, 35 h.p.
Electric Motor, 25 h.p.
Hopper Capacity—Conical Hopper, 1¼ cu. yds.
Remixing Hopper, 2 cu. yds.
Rotary Remixer, 1½ cu. yds.

Weight equipped with Conical Hopper, Gas Engine Drive, no mounting, 9,100 lbs.

Weight equipped with Conical Hopper, Electric Motor Drive, no mounting, 9,600 lbs.

Weight equipped with Remixing Hopper, Gas Engine Drive, no mounting, 13,100 lbs.

Weight equipped with Electric Motor Drive, no mounting, 13,400 lbs.

Weight equipped with Rotary Mixer, Gas Engine Drive, no mounting, 11,950 lbs.

Weight of Wheel Mounting (4 wheels—front and rear axles and towing tongue), 900 lbs.

Weight of Skid Mounting, 500 lbs.

FOR MODEL No. 200 REX SINGLE PUMPCRETE

Capacity cubic yards per hour, 25 to 33.
Bore of Cylinder, 7.9″.
Stroke of Piston, 12″.
R.P.M. (Approximate), 50.

POWER
6-Cylinder Gasoline Engine, 40 h.p.
Electric Motor, 30 h.p.
Hopper Capacity—Conical Hopper, 1¼ cu. yds.
Remixing Hopper, 2 cu. yds.
Rotary Remixer, 1½ cu. yds.

Weight equipped with Conical Hopper, Gas Engine Drive, no mounting, 9,700 lbs.

Weight equipped with Conical Hopper, Electric Motor Drive, no mounting, 10,000 lbs.

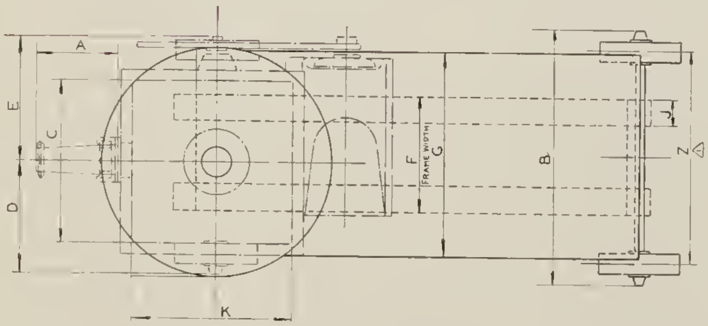
Weight equipped with Remixing Hopper, Gas Engine Drive, no mounting, 13,650 lbs.

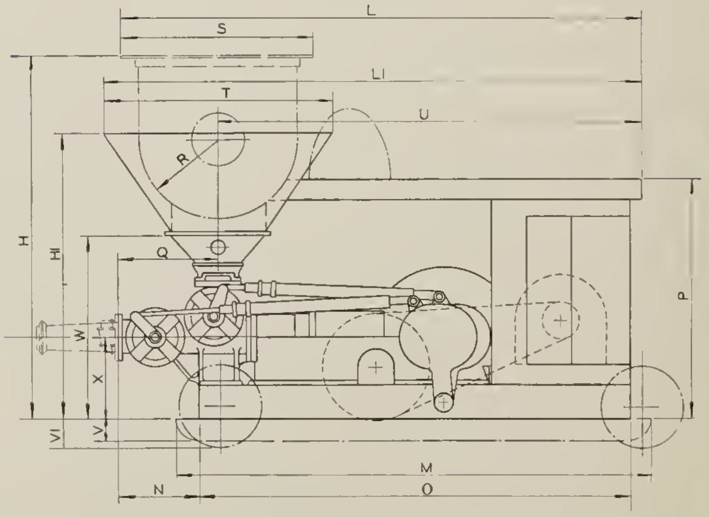
Weight equipped with Remixing Hopper, Electric Motor Drive, no mounting, 13,800 lbs.

Weight equipped with Rotary Remixer, Gas Engine Drive, no mounting, 12,550 lbs.

Weight of Wheel Mounting (4 steel wheels, rear and front axle and towing tongue), 900 lbs.

Weight of Skid Mounting, 500 lbs.





	A	B	C	D	E	F	G	H	HI	J	K	L	LI	M	N	O	P	Q	R	S	T	U	V	VI	W	X	Z
MODEL-180	24	73½	46¾	31¾	37¾	34⅜	59½	102¾	81¼	8	48	151	158½	138	22⅞	126	67⅜	28¾	24	54½	69½	123¾	4⅜	8	51¾	22¾	60½
MODEL-200	24	73½	46¾	31¾	37¾	34⅜	59½	102¾	81¼	8	48	151	158½	138	23¾	126	67⅜	29¼	24	54½	69½	123¾	4⅜	8	51¾	22¾	60½

REX SINGLE PUMPCRETE MODEL 180 AND 200

SPECIFICATIONS *Section* 9

FOR MODEL No. 180 REX DOUBLE PUMPCRETE

Capacity cubic yards per hour, 40 to 55 cu. yds.

Bore of Cylinder, 7.1″.

Stroke of Piston, 12″.

R.P.M. (Approximate), 50.

POWER

6-Cylinder Gasoline Engine, 55 h.p.
Electric Motor, 50 h.p.

Hopper Capacity—Conical Hopper, 2 cu. yds.
Remixing Hopper, 3 cu. yds.

Weight with Conical Hopper, Gas Engine Drive, no mounting, 16,900 lbs.

Weight with Conical Hopper, Electric Motor Drive, no mounting, 17,850 lbs.

Weight with Remixing Hopper, Gas Engine Drive, no mounting, 22,200 lbs.

Weight with Remixing Hopper, Electric Motor Drive, no mounting, 23,050 lbs.

Weight of Skid Mounting, 650 lbs.

FOR MODEL No. 200 REX DOUBLE PUMPCRETE

Capacity cubic yards per hour, 50 to 65 cu. yds.

Bore of Cylinder, 7.9″.

Stroke of Piston, 12″.

R.P.M. (Approximate), 50.

POWER

6-Cylinder Gasoline Engine, 55 h.p.
Electric Motor, 50 h.p.

Hopper Capacity—Conical Hopper, 2 cu. yds.
Remixing Hopper, 3 cu. yds.

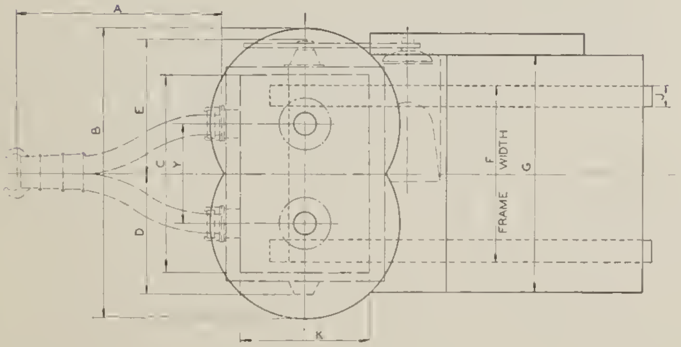
Weight equipped with Conical Hopper, Gas Engine Drive, no mounting, 17,550 lbs.

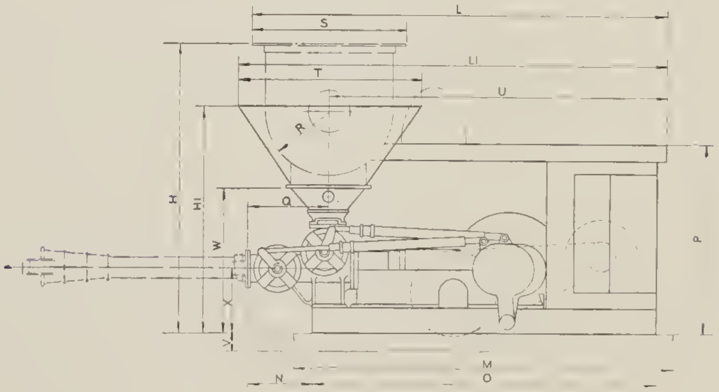
Weight equipped with Conical Hopper, Electric Motor Drive, no mounting, 18,400 lbs.

Weight equipped with Remixing Hopper, Gas Engine Drive, no mounting, 22,800 lbs.

Weight equipped with Remixing Hopper, Electric Motor Drive, no mounting, 23,600 lbs.

Weight of Skid Mounting, 650 lbs.





	A	B	C	D	E	F	G	H	HI	J	K	L	LI	M	N	O	P	Q	R	S	T	U	V	W	X	Y
MODEL-180	75	105¾	70¾	44	50½	64	88	104¼	83¼	8	48	153	158½	138	22¾	126	67½	28¾	24	58½	69½	123¾	6½	53¼	24¼	36
MODEL-200	75	105¾	70¾	44	50½	64	88	104¼	83¼	8	48	153	158½	138	23¾	126	67½	29¼	24	58½	69½	123¾	6½	53¼	24¼	36

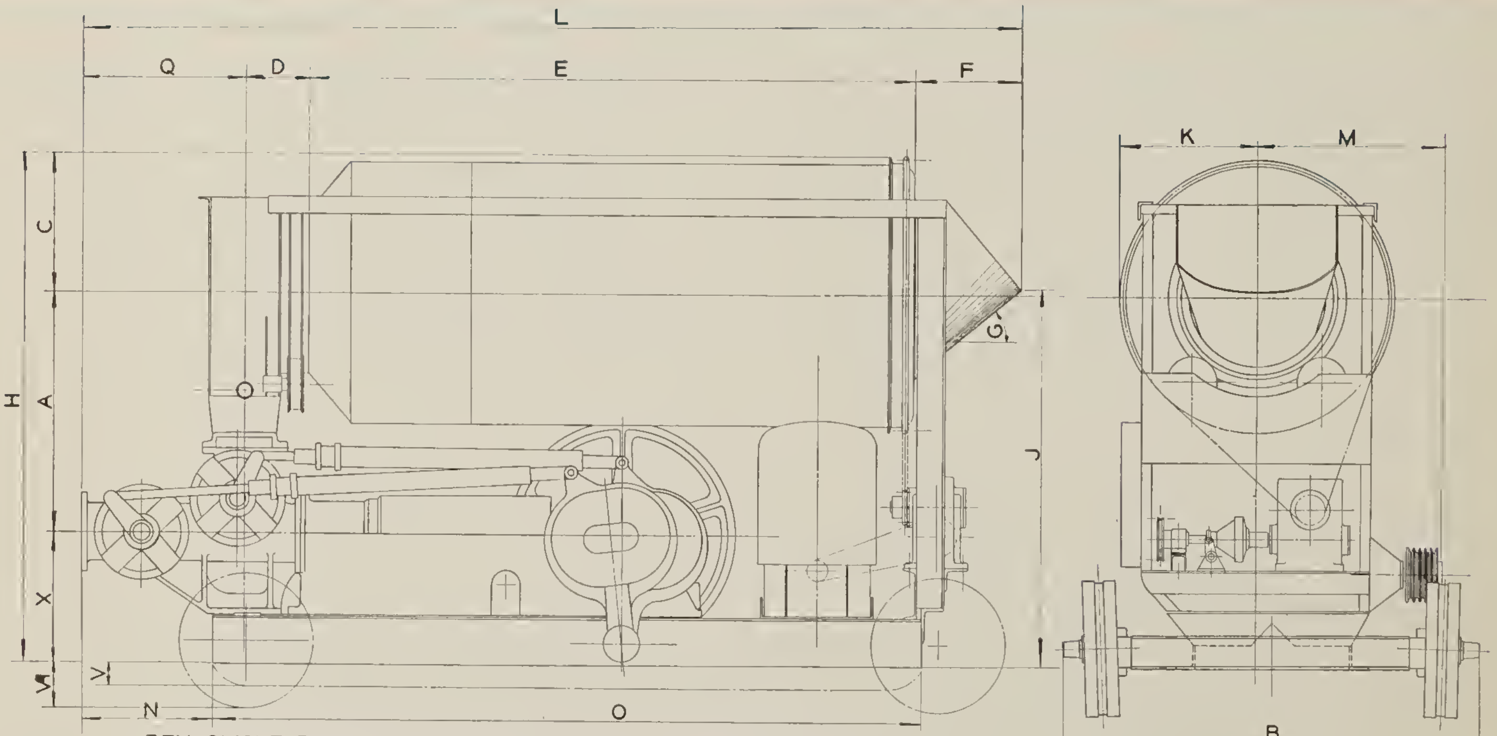
REX DOUBLE PUMPCRETE MODEL 180 AND 200

SPECIFICATIONS *Section* 9

FOR REX SINGLE AND DOUBLE REMIXING HOPPERS

	SINGLE	DOUBLE
Capacity in cubic yards	2 cu. yds.	3 cu. yds.
Number of Remixing Blades	6	10
POWER		
4-Cylinder Gasoline Engine	8 h.p.	10 h.p.
Electric Motor	5 h.p.	7½ h.p.
Weight equipped with Gas Engine Drive	4260 lbs.	5830 lbs.
Weight equipped with Electric Motor Drive	4080 lbs.	5775 lbs.

REX SINGLE PUMPCRETE WITH ROTARY REMIXER



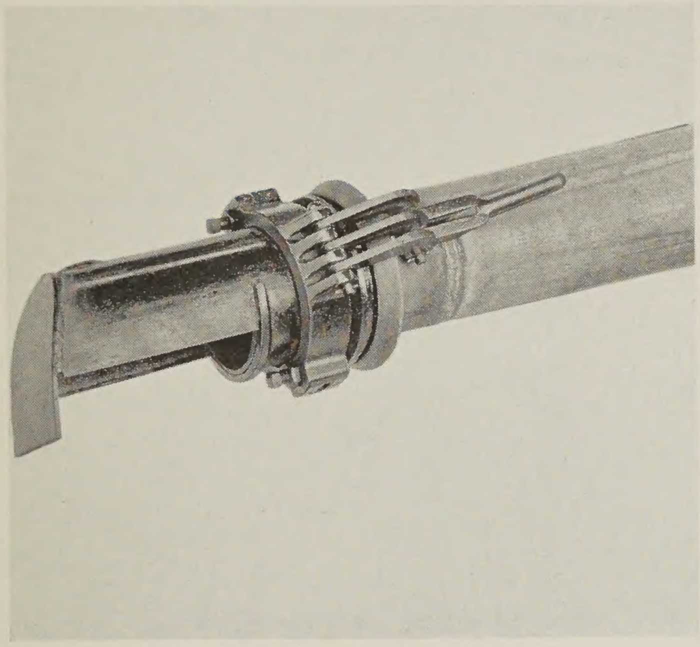
REX SINGLE PUMPCRETE MODEL* 200 WITH ROTARY AGITATOR

A	B	C	D	E	F	G	H	J	K	L	M	N	O	Q	V	VI	X
42⅝	73½	24¼	11¼	107	19 15/16	40°	89⅝	66⅜	24¼	167 7/16	33 3/16	23¾	126	29¼	4	8	22¾

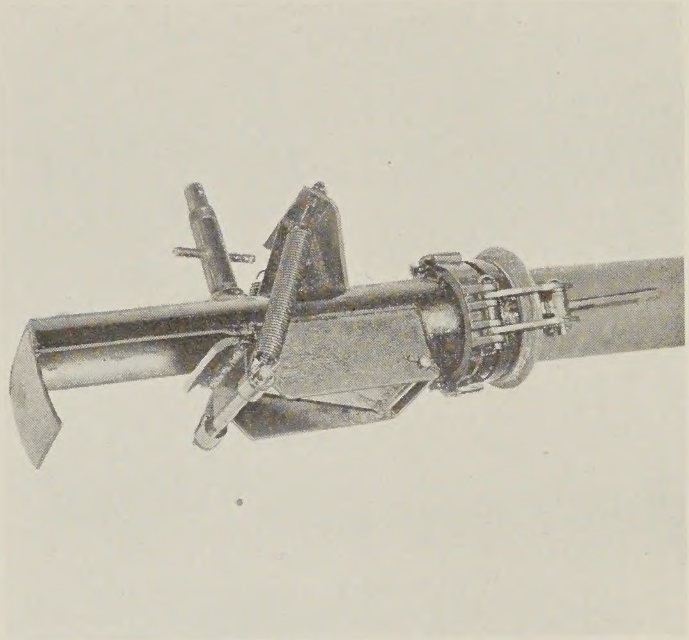
Note: Dimensions are same for Model 180.

ACCESSORIES

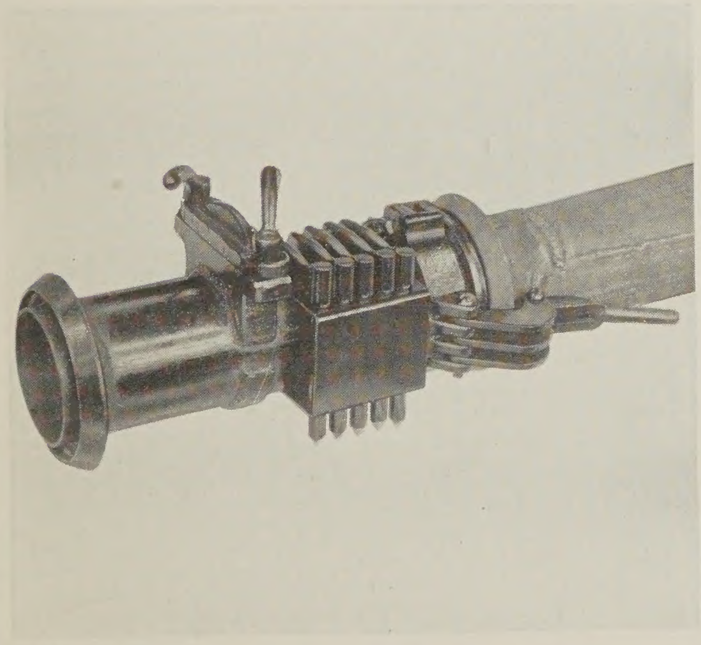
Section 9



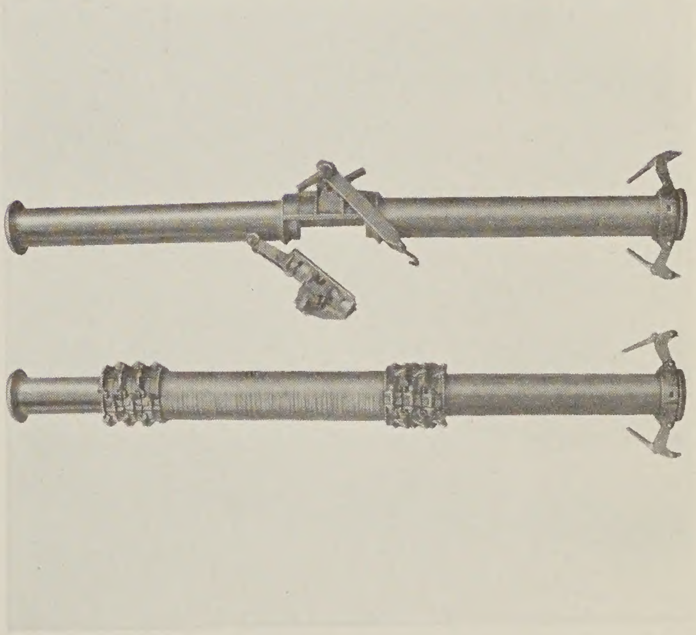
Discharge section for end of pipe



Restrictor type of discharge section



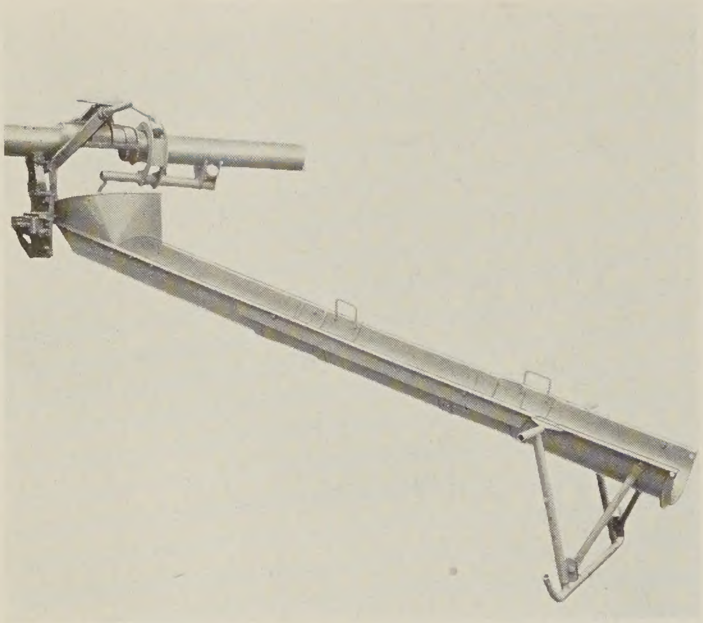
Pin type shut-off valve



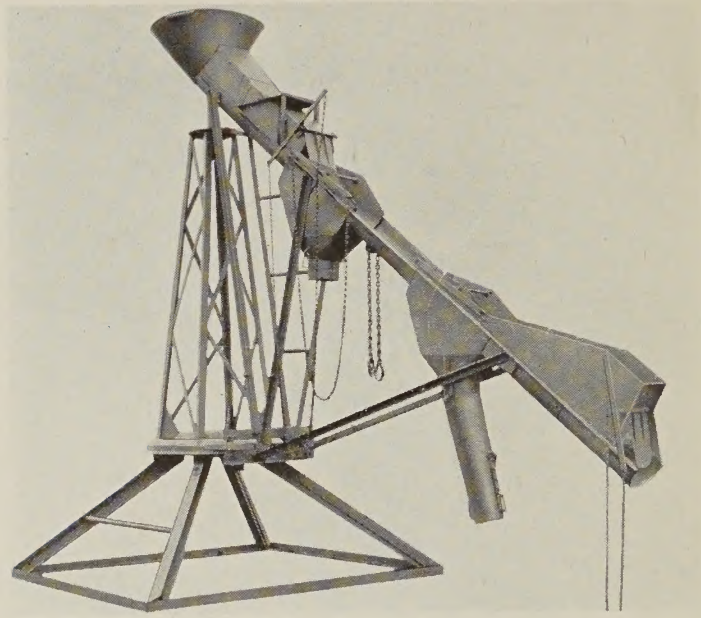
Top—Gate section
Bottom—Hose section

ACCESSORIES

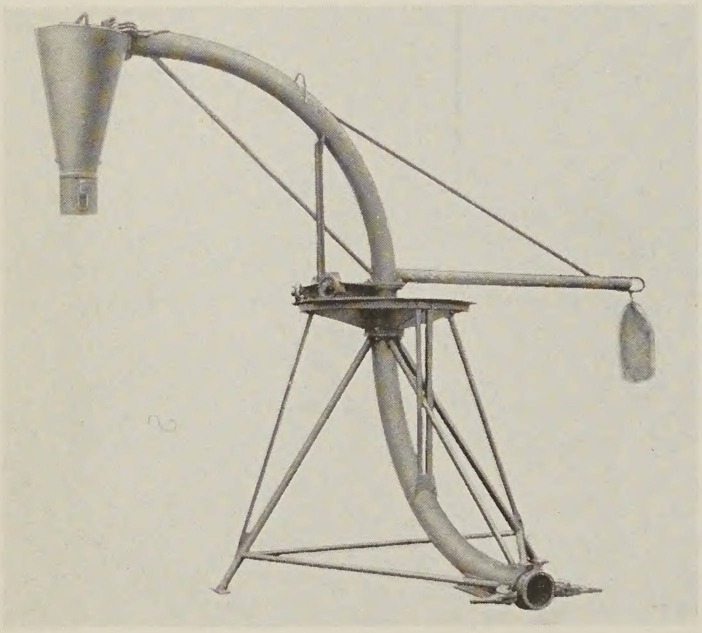
Section 9



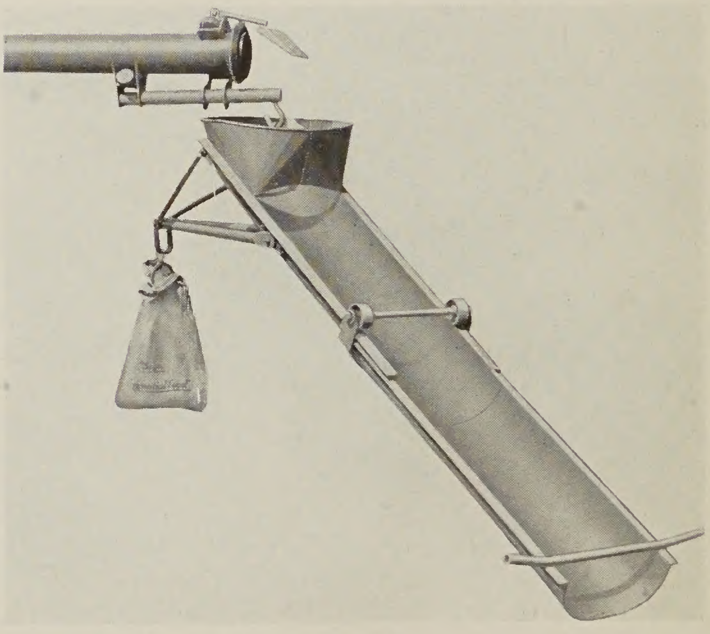
Distributor chute spaced with two gates suspended from roller type hanger with foot at lower end—Set to receive concrete from pipe line gate.



Swivel chute distributor with three points of discharge.



Swivel Type Distributor discharging into hopper for elephant trunk.



Counterweighted chute with roller extension and roller hanger.

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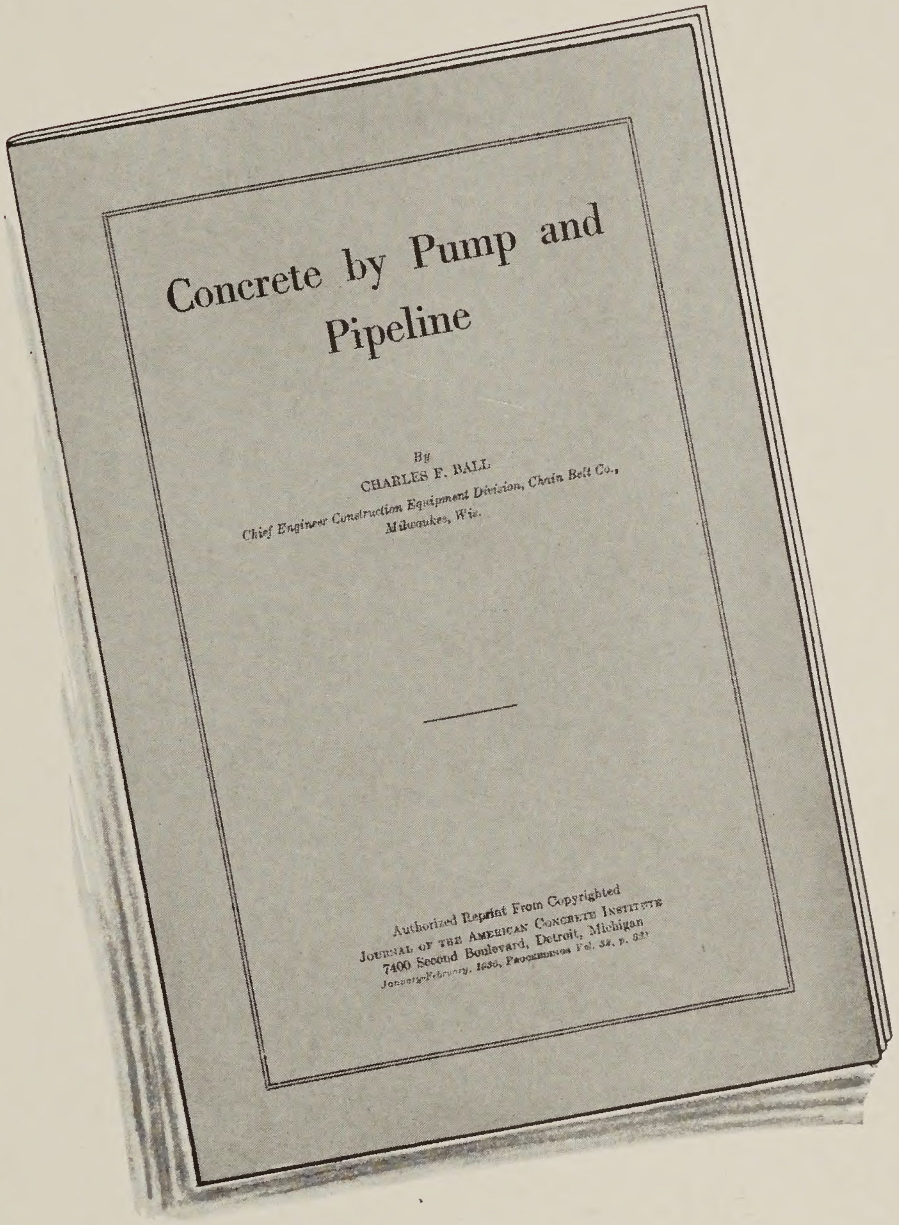

Concrete by Pump and Pipeline

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Milwaukee, Wis.

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January-February, 1936, PROCEEDINGS Vol. 32, p. 333

For those interested in further, more complete and technical information on the PUMPCRETE, the bulletin* "Concrete by Pump and Pipe Line" shown above is available upon request. It is an authorized reprint from the January-February 1936 "Proceedings" of the American Concrete Institute. It covers the history and development of the Rex PUMPCRETE as well as comprehensive data on the details of PUMPCRETE mixtures placed and similar information. Write to the Construction Equipment Division, Chain Belt Co., Milwaukee, Wisconsin.

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*Volume 32, Page 333.

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REX

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